Commission of Inquiry
into
Residential Tenancies

Workable Rent Regulation: A Synthesis

Andrew Muller

Research Study No. 27

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by

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ABSTRACT

This paper examines how alternative government policies may affect the ability of private rental housing markets to meet housing policy objectives in Ontario over the next 10 to 20 years. It addresses three fundamental questions:

i. what problems are most likely to emerge in attempting to meet rental housing policy objectives over the next 15 to 20 years,

ii. to what extent can these problems be solved by private and public initiatives, assuming the continuation of rent regulation in its present form, and

iii. how would alternative forms of rent regulation and complementary policies affect the economy's ability to meet these objectives?

Throughout the paper, emphasis is placed on synthesizing materials already prepared and presented to the Commission of Inquiry. In particular, this paper relies primarily on Stanbury's The Normative Basis of Rent Regulation in defining the objectives of rental housing policy, on the studies by Stanbury and Vertinsky and by Quirin for analyses of alternative forms of rent regulation and on Chant for an analysis of policies complementary to rent regulation. The analysis of problems expected to develop in rental housing markets is based on the study by David Foot. The structure of the rental housing industry has been addressed in some background studies prepared for the Commission. Rather than break new ground, this paper assesses our ability to answer the three central questions identified above.

The study proceeds in a natural sequence. Chapter I reviews the key objectives that may be relevant to rental housing policy. After a brief examination of the evolution of the rental housing stock, Chapter II considers the measurement of and past successes in reaching each objective. It also considers the difficulties which are likely to arise in meeting these objectives in the future. Chapter III reviews our knowledge of how changes in the supply of rental housing are determined, with emphasis on the role of government policy. In light of this, Chapter IV assesses the ability of private markets to meet future needs. Chapter V considers the probable effect of alternative forms of rent regulation and complementary policies. In the light of this analysis, Chapter VI analyses combinations of public policies (policy menus) which might be more effective than any one policy pursued singly.

Chapter VII summarizes and concludes the study. Since it is essentially self-contained, readers in search of an executive summary are encouraged to consult it first.

PREFACE

The road to completion of a research study has many turns and the final destination may have only a modest resemblance to the original. This study of the effect of rent regulation on the supply of rental housing has evolved into a broad examination of Ontario's rental housing problems, their causes, and possible strategies for their solution. I hope that its final form proves adequate to the needs of the Inquiry.

All research is essentially collaborative. I would like to express my special thanks to John Todd, Research Director of the Inquiry, for his continued advice and encouragement as the study developed. John Pringle provided valued research assistance and a sharp editorial eye. Thelma Hershorn and her staff, Carroll Brooks and Ronit Little, made my sojourn at the offices of the Inquiry both pleasant and effective.

I owe a great intellectual debt to the authors of previous research studies and background papers for the Inquiry. Without their work this study could not have been completed. I have also profited from discussion with Professors James Rice and Tom Lewis of McMaster University, Larry Smith of the University of Toronto, and participants in the Government and the Marketplace seminar at Carleton University. Representatives of the City of Ottawa, CMHC, and the Ontario Ministry of Housing have also been most helpful. Errors of interpretation and fact are entirely mine.

One's early training determines the range of grammatical usage one finds acceptable. With apologies to those who may be offended, I ask readers to interpret all uses of the third person masculine singular as including the feminine.

Ottawa,
December, 1985.

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CHAPTER I

INTRODUCTION

A. The Nature of this Study

1. Relation to Previous Work for the Inquiry

This is the final paper prepared for presentation to the Ontario Commission of Inquiry into Residential Tenancies (the Inquiry) in the second phase of its proceedings. The Inquiry was established on November 26, 1982, to examine the laws affecting residential tenancies in Ontario and the effect of rent review in the province, to recommend changes in the laws to ensure fair and equitable treatment to tenants and landlords, and to recommend what measures might be undertaken, in addition to rent review, to assist in the provision of rental accommodation at fair prices (Thom, 1984, xii-xxi). The first phase of the Inquiry considered only the current scheme of rent regulation in the province. The second phase is to consider the effect of rent regulation on the supply of housing and the measures which might be undertaken to provide adequate accommodation at fair rents (p. 5).

As part of its investigation, the Inquiry commissioned a series of 14 Research Studies on various aspects of rent regulation. Subsequently it commissioned a series of Background Papers which would form the basis for testimony by their authors at public hearings. These studies form part of an integrated work plan to investigate all aspects of rent regulation relevant to the second phase of the Inquiry.

In the first of the Background Papers, Stanbury (1984) considered the reasons why governments might wish to intervene in the market for rental housing. In that paper and in subsequent testimony he identified six possible objectives of rent regulation. Three subsequent Background Papers have examined a number of instruments which might be used to achieve these objectives. Stanbury and Vertinsky (1985) analysed the design characteristics of rent control systems and distinguished between "moderate" and "restrictive" systems of rent regulation. Quirin (1985) analysed the regulation of landlords' rate of return as one particular variant of rent regulation. Chant (1985) discussed a range of policies complementary to rent regulation which might assist in providing rental accommodation at fair rents. Finally, Foot (1985) has projected future demands for rental housing and identified a number of problems which may develop in the future.

It is the challenging task of this paper to draw together the evidence assembled in the earlier studies and to focus it on the questions addressed by the Inquiry. In particular, this paper is intended to aid the Inquiry's consideration of its third term of reference, namely to recommend policies complementary to rent review which might contribute to the provision of rental housing at fair rents.

The effect of alternative complementary policies depends on the nature of the system of rent regulation. Accordingly, this paper also considers the various systems of rent regulation and their interaction with other rental housing policies.

The paper addresses three fundamental questions:

i. What problems are most likely to emerge in attempting to meet rental housing policy objectives over the next 15 to 20 years?

ii. To what extent can these problems be solved by private and public initiatives, assuming the continuation of rent regulation in its present form?

iii. How would alternative forms of rent regulation and complementary policies affect the economy's ability to meet these objectives?

These questions arise from an approach to public policy advocated by J. Tinbergen (1952) and widely accepted amongst economists. According to this approach, the performance of an economic system is judged by the extent to which it achieves specified objectives as measured by target variables. In the context of rental housing a target variable might be the ratio that the rent paid by a specified group of families bears to their income. Target variables cannot be adjusted directly by governments, rather governments have certain instruments with which they can affect the behaviour of the economic system and thus indirectly affect the target variables. Examples of instruments relevant to housing policy include rent review ceilings, assisted rental construction plans, and general monetary and fiscal policy insofar as it affects mortgage interest rates.

Accordingly, successful economic policy requires attention to at least three distinct areas, namely (1) the objectives to be pursued and related target variables, (2) the instruments to be chosen, and (3) the manner in which the economic system responds to the instruments so as to alter the level of the target variables. These correspond roughly to the three central questions listed above. The first question concerns the selection of appropriate targets or objectives for rental housing policy. The second addresses the nature of the economic system which provides rental housing (the housing market) and the third requires attention to the effects of alternative policy instruments on the target variables.

2. Outline of the Study

The organization of the paper corresponds to the three areas just discussed. The remainder of this chapter reviews the housing policy objectives that have been selected for intensive discussion. After a brief examination of changes in rents and the rental housing stock, Chapter II considers each objective in turn. For each, the problem of measurement is first discussed. Then the record of the past twenty years is examined to ascertain whether problems associated with this objective have been important. Finally, an assessment of their present importance is made.

Chapter III reviews our knowledge of how the market for rental housing operates. First we present a simple model or description of the operation of rental housing markets. Three concepts of rent will be particularily important: the controlled rent, the market clearing rent, and the rent which provides the going rate of return for landlords (the economic rent). We then examine whether the structure of the actual rental housing market allows us to use this model. Finally we attempt to assess the current configuration of controlled rents, market rents and economic rents.

Chapter IV considers probable future developments in rental housing markets with the aim of identifying those rental housing objectives which will be particularly difficult to achieve. This chapter draws on the demographic projections similar to those developed for the Inquiry by Foot (1985).

In Chapter V we address the key question of how various policy instruments recommended to the Inquiry would affect our ability to achieve the policy objectives identified earlier. The effect of each of the generic policies identified by Chant (1985) is compared to the list of rental housing policy objectives under alternative assumptions about the nature of the rent review program in effect.

The theory of economic policy outlined above implies that to achieve a target level for more than one variable requires at least as many independent instruments. Chapter VI considers several combinations of rent review and complementary policies which might be preferable to relying completely on any one strategy for regulating the rental housing market. These are offered solely for the consideration of the Commissioner, since it is not the role of this study to recommend any particular set of policies to the Inquiry.

Chapter VII summarizes and concludes the study. Readers may find it useful to consult it separately as a guide to the argument in the following pages.

A simple methodology has been followed throughout the study. It relies primarily on evidence presented and discussed in earlier Background Papers and Research Studies commissioned by the Inquiry. Where appropriate, these have been supplemented by additional observations, data, and appeal to the wider literature.

B. Criteria for Evaluating Economic Performance

In his earlier submission to the Inquiry, Stanbury (1984, v.2, 1-2) argued that government intervention may be rationalized by appeal to one or more of three broad objectives: the promotion of efficiency, the redistribution of income, or the creation of property rights. The objectives of particular policy initiatives may be more specific than this, but will generally be found to fall into one of the broader categories. Thus he suggested (1984, v.1) that rent regulation in Ontario may have had five specific objectives:

i. the prevention of unconscionable rent increases ("rent gouging"),
ii. maintaining or expanding the stock of affordable rental housing,
iii. reinforcing security of tenure,
iv. remedying market failures due to imperfect knowledge, and
v. smoothing the path of adjustment to new equilibria by reducing the rate of increase in rents ("rent stabilization").

A sixth objective was elaborated upon during the public hearings. This was

vi. the creation or maintenance of social diversity in the downtown core of large metropolitan areas (Stanbury and Vertinsky, 1985, 7-8 - 7-9).

These objectives were advanced explictly as possible normative bases for rent regulation. They were not intended as a list of desirable objectives for rental housing policy generally. In making recommendations about Ontario's system of rent review and policies complementary to it, the Inquiry may wish to consider whether these six objectives capture all considerations relevant to rental housing policies, or whether some other objectives may also be relevant.

The field of Industrial Organization, a sub-discipline of Economics, is particularily concerned with evaluating the performance of economic markets. It may be useful to apply the criteria used by Industrial Organization economists to the rental housing market. By doing so we may discover whether other important economic objectives should be added to Stanbury's list.

According to the basic paradigm of Industrial Organization (see Scherer, 1980, ch 1), the performance of any economic market is to be evaluated on four criteria. These are

i. economic efficiency,
ii. equity,
iii. contribution to full employment and price stability, and
iv. contribution to technical progress.

Very similar criteria were advanced by the Economic Council of Canada in its First Annual Review and subsequently. It will be seen that Stanbury's objectives fit well into this framework, but that some aspects of desirable economic performance are not entirely explicit in his list. We will consider the four criteria of economic performance one by one.

1. Efficiency

Maximizing economic efficiency roughly corresponds to maximizing real gross national product (GNP) per person.[1] GNP per capita is an important determinant of both average real incomes and the average standard of living of the population. For this reason, efficiency is an important goal of government policy. While it is to be expected that the public may not wish to treat economic efficiency as the only goal of public policy, pursuit of any other goal will normally impair efficiency and the income foregone as a result should be considered by policymakers.

The concept of economic efficiency is a complex one. As discussed by Stanbury (1984, v.2, 2-2), a market economy is efficient when there is no way of improving anyone's welfare without hurting someone else's. This apparently esoteric criterion may be resolved into three components.[2] In this section we will examine each component and relate it to one or more of Stanbury's objectives. Where Stanbury's list seems to be an incomplete guide to public policy, supplementary objectives will be proposed.

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[1] The correspondence is only approximate for many reasons. To note only a few, measured GNP does not account for the value of leisure time, the value of non-market activities such as housewives' labour, and the effect of "externalities" such as pollution while economic efficiency does. In addition, if the size of the population is affected by economic activity, maximization of per capita GNP is not the same as maximizing aggregate GNP.

[2] This division, although not discussed by Stanbury, has been a commonplace of applied welfare economics since Bator's (1957) well-known exposition.

First, a fully efficient market will lead to the production of goods and services at lowest possible cost. In the present context, the product is the bundle of housing services (location, number of rooms, amenities, maintenance levels) which are supplied by landlords to tenants. These are to be produced at least cost. That is to say, for example, that new buildings are not to be constructed if maintenance and conservation expenditures can provide equivalent accommodation at lower cost. Nor are expensive construction techniques to be employed where simpler ones would suffice. Similarly, very extensive fire separation between units is not to be provided if equivalent safety can be provided by less expensive means. This characteristic may be called technical efficiency.

Achieving technical efficiency ought to be an important objective of public policy in Ontario because it is a fundamental determinant of the average standard of living for Ontario residents. A reduction in the cost of supplying rental accommodation means that either rents or subsidies to renters can be reduced without reducing the housing services consumed. This frees up income to be spent on other goods and services and consequently raises the standard of living. Although Stanbury identifies intervention to promote efficiency as a basic rationale for government intervention in markets, none of his six specific objectives is directly related to technical efficiency. In this report, however, the production of rental housing at least cost will be considered an important social objective.

The second of the three components of economic efficiency may be termed distributional efficiency. This requires that those goods and services which are produced should be distributed so as to yield the maximum satisfaction. In the present context, distributional efficiency would require that the housing stock be allocated so as to eliminate undesired commuting and mismatches between family size and accommodation. For example, a market outcome in which one family head lived in Scarborough but worked in Hamilton while another lived in Hamilton and worked in Scarborough would be inefficient if it came about through the inability of the families to find accommodation rather than actual preferences about location. Thus concern about mobility is a concern about distributional efficiency. If rental housing markets operate so as to reduce the ability of households to move to more suitable accommodation the housing stock is not being used efficiently.

Stanbury's fourth objective of rent regulation, remedying market failures due to imperfect knowledge, is related to distributional efficiency. Imperfect knowledge of the rents on alternative accommodation may prevent tenants from moving to the type of accommodation which suits them best, given their incomes and tastes. Similarly, transactions costs may cause tenants to remain in housing which no longer suits them best. As an objective for housing policy, however, minimizing the effects of imperfect information and transactions costs is too narrow to capture the important idea that distributional efficiency requires enough vacant units to allow renters to move easily to rental housing that is appropriate in size, location and quality. In this paper, we attempt to capture this concept by the term availability. We will consider it an important objective of housing policy.

The third component of economic efficiency may be termed overall or allocative efficiency. This component requires that the production of goods and services be increased until the value of one more unit precisely equals the full social cost of producing it. The value of a unit is measured by what a purchaser is willing to pay for it. Two examples of allocative inefficiency may clarify the concept.

Suppose the owner of a house can convert it into a duplex and make a normal return on his invested capital provided the initial monthly rental is $400 and rises at the rate of inflation. Suppose further that there is a tenant willing to rent the duplex for $425 per month, indexed to inflation. Clearly, both potential landlord and tenant would be happy to agree to some intermediate rent. But if the landlord fears that the system of rent control will prevent his raising rents at the rate of inflation, or if he fears that the expense of appearing before a rent review commission will be very high, he may well decide not undertake the conversion. This is allocatively inefficient.

Efficiency is not always inconsistent with equity. This can be demonstrated by an argument which may appear cruel and insensitive to some readers. It is important, however, to understand that sometimes both efficiency and equity require intervention in housing markets.

As a second example, then, suppose that a single parent is not able to pay more than $200 per month for an adequate apartment without grossly reducing her ability to purchase other necessities. One might wish to aid her on humanitarian grounds. Moreover, aid might be further justified on the following efficiency argument.

Suppose that the break-even rent which just covers all the landlord's costs for this apartment is $300 per month. A naive application of the concept of efficiency would suggest that it is allocatively inefficient to construct the apartment and rent it to the parent at $200 per month because the implicit subsidy of $100 could be split between the parent and the taxpayer, leaving both better off. Suppose following Schotter (1985), however, that with a subsidized rent the single parent can provide adequate care for her child and pursues a legal but low paying job while if no subsidized housing is available she is under so much stress that she abuses her child or drifts into illegal activities.[3] The consequences of this decision might well impose costs in excess of $100 per month on taxpayers. If this were so, then it would be allocatively efficient to provide the subsidized housing, since when the social costs which are avoided by building the subsidized housing are deducted from the $300 break-even rent, the net cost of the social housing is less than the parent's willingness to pay.

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[3] The argument at this point does not require a judgement about whether these consequences actually occur. It is sufficient to admit their possibility.

A similar, but perhaps less cynical, argument can be made on the grounds of altruism. There may be many people who would willingly reduce their consumption slightly in order to assist those in serious need of housing. Economic efficiency requires that their willingness to pay be added to the single parent's in determining whether to subsidize her rent.

The possibilty that people deprived of adequate housing may turn to crime, suffer severe health problems or face increased difficulty in providing for their children is an example of an externality associated with housing consumption. Allocative efficiency requires that such externalities be considered in public decision making, but self-interested agents interacting through markets will not have an incentive to include them in their own calculations. Accordingly, private markets will not lead to an allocatively efficient outcome when such externalities are important.

In general, allocative efficiency requires that the rent paid on any dwelling equal the full social cost of providing that dwelling, after adjusting for any externalities. For example, if the rent charged is more than the full social cost, too little rental housing will be consumed. When this happens, it may be possible to design schemes which provide more housing and leave all groups - renter, landlord and taxpayer - better off than they were before.

The objectives of preventing rent gouging, stabilizing rents and maintaining affordability are all related to allocative efficiency as well as equity. If landlords exploit their monopoly power by charging rents which are higher than the full cost of providing rental accommodation, insufficient rental housing will be provided. If rents should suddenly rise very rapidly due to increased demand and then subside to lower long run equilibrium levels as new supplies come on the market, then some tenants may be forced to move out of accommodation they could afford in the long run. Such tenants incur transactions costs which might have been avoided if adjustment were slower. Thus, in principle, rent stabilization could improve allocative efficiency. Finally, if low income families cannot afford suitable accommodation, negative externalities may be generated. In all cases, there is an argument for intervention on efficiency grounds as well as on equity grounds.

Unfortunately, none of Stanbury's rationales for rent regulation address the converse problem of too much housing consumption. If rents are less than the full cost of providing rental accommodation, too much housing is consumed. This is analogous to recent experience with low energy prices. During the 1970's the Canadian price for crude oil and related products was far below the full social cost of importing the oil, processing and distributing it. Consequently Canadians drove excessively large cars and needed to be cajoled into insulating their homes by expensive government grants. Social commentators deplored the lack of attention to conservation and alternative sources of energy, but it took many years before the critical role of higher prices in encouraging conservation was recognized.

When the price of rental housing is too low, too much is consumed. Individuals who could otherwise share accommodation form separate households, rooms which could be rented out are left vacant. Landlords have no incentive to add to the existing rental stock nor to prevent removals from it. We have a housing shortage analagous to the "energy shortage" of the 1970's.

When too much housing is consumed, the province's ability to achieve other goals is reduced. The difference between the housing that people wish to consume and the housing that landlords wish to supply must be made up by a public subsidy, analogous to the subsidies provided to oil importers in the 1970's. These subsidies must be paid for by increased taxation (which reduces income available to consumers to meet their other needs) or by diverting government expenditures from other programs. These programs include education, health, research and environmental improvement. The welfare of the community at large is reduced.

Since none of Stanbury's objectives of rent regulation address the problem of overconsumption of housing, this study proposes that respect for other social goals be added to the set of housing policy objectives. Respect for other social goals requires an attempt to ensure that housing programs do not account for a disproportionate share of government budgets.

As noted, two of Stanbury's list of possible objectives for rent regulation explicitly refer to economic efficiency.

These were the reduction of imperfect knowledge and transactions costs on the one hand and stabilization of rents on the other. Two other objectives listed by Stanbury may be related to efficiency. Efficiency is promoted when property rights are well defined, negotiable and transferable. For example, precise legal provisions for security of tenure may enhance the ability of landlords and tenants to negotiate mutually satisfactory alterations in their terms of occupancy. If so, security of tenure can be advocated in the name of increased efficiency. Again, the geographic segregation of different income and demographic groups on the basis of market rents may impose costs both on those consumers who gain satisfaction from a cosmopolitan atmosphere and those who pay for any increased social services, police protection and vandalism in segregated, low income neighbourhoods. Thus the goal of social diversity can be advocated on efficiency grounds.

2. Equity

The second criterion for evaluating economic performance is equity. The Inquiry's terms of reference (Thom, 1984, xiii-xiv) make it clear that equity and fairness are to be the dominant considerations in the Inquiry's deliberations. There is no agreement among policy analysts about what constitutes true equity and fairness, indeed the issue has pervaded philosophical discussion from earliest times. Many economists, however, appear to have adopted an excessively narrow view of the issue.

Economists have tended to apply two principles in judging equity.[4] Horizontal equity requires that two individuals in comparable circumstances be treated equally. Vertical equity requires that those with greater ability to pay for public services should in fact pay a larger share. There appears to be little disagreement with the principle of horizontal equity, although it is not always easy to agree upon circumstances that are truly comparable. There is less consensus on the exact role of vertical equity.

Often, the vertical equity of a policy is judged on the degree to which it redistributes income from the rich to the poor.[5] Such redistribution is not universally accepted as desirable. Stanbury (1984 v.2, ch. 3) cites approvingly authors who express concern about the negative effect of income redistribution on the total amount of income to be distributed (p. 3-13), who criticize the presumption of equality (p. 3-17) and who argue that an unconstrained market system is "without peer, particularily if individual liberty is the most important norm in society" (p. 3-31). In the view of these authors, equity is to be found in equality of opportunity, not in equality of result.

The tendency to interpret equity largely in terms of income distribution is unfortunate, because it leads to a cynical view of the motives of those who argue for equity goals. Thus, for example, Stanbury and Vertinsky (1985, 3-35) see rent control as "just another battle by interest groups over the distribution of income and wealth". Such an interpretation of demands for equity as demands for income redistribution may neglect an important strand of moral thought.

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[4] See, for example, Slack and Amborski (1984, 42), Fallis (1984, 45) and Musgrave (1959).

[5] Consider, for example, Slack and Amborski (1984) who state both that the purpose of their study "is to examine the distributive impact of rent regulation" (p.1) and that their study "focuses on equity" (p.2). Clearly they consider the concepts virtually synonymous.

It is possible to perceive two distinct approaches to the derivation of normative or ethical principles. One attempts to derive rules of ethical behaviour from the consideration of individual preferences. Rawls (1971), who argues that individuals choosing principles of justice behind a veil of ignorance about their true position would agree on the priority of liberty and the arrangement of social and economic inequality in favour of the least advantaged (Stanbury, 1984, v.2, 3-21), writes in this context as does von Hayek, who advocates minimum interference with market outcomes (Stanbury, 1984, v.2, 3-30). A second approach, somewhat out of fashion, seeks an absolute standard of ethical behaviour. Thus Plato in the Republic (IV. 432) defines justice as that quality "which makes it possible for ...wisdom, courage, and temperance, to take their place in the commonwealth".[6] Similarly Lewis (1947) argues that there is a system of natural law which is reflected in the common ethical teachings of all human societies. This second approach may lie behind many of the arguments popularly advanced for rent control (Stanbury, 1984, v.1, 1-18).

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[6] The translation is Cornford's (1945,127).

Consider, for example, the objectives of preventing rent gouging and maintaining a supply of affordable housing. Stanbury and Vertinsky (1985, 7-7) interpret the former largely in terms of preventing redistribution of income from tenants to landlords. But the political demand for rent control was supported largely by stories of the poor and elderly who were being forced from their homes in times of rising rents. The popular reaction to these stories was probably based more on the principle that it is ethically wrong to take advantage of the helpless than on a specific desire to redistribute income from landlords to tenants.[7] Similarly, the desire to provide affordable housing is less a desire to ensure that no one must spend more than 25% of his or her income on rent than a reflection of the feeling that human dignity requires minimum standards of necessities such as food, shelter and clothing (see Fallis, 1984, 25).

These examples suggest that equity objectives should not be interpreted purely in terms of income distribution, but in terms of what is considered ethical or fair behaviour. The exact definition of fair behaviour remains undefined, although Knetsch, Kahneman and MacNeill (1984) provide interesting evidence about the values generally shared by tenants and homeowners. Neither of Stanbury's equity objectives is best understood as a redistribution argument. For these reasons, his list of objectives should be augmented by a general reference to the equity of housing policy, including fairness as well as horizontal and vertical equity.

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[7] It is not denied that the effect of rent control was to counter such redistribution.

3. Full Employment and Price Stability

Investment in new or renovated housing is an important determinant of the overall level of economic activity, and hence of the level of employment. Government policies, such as tax rate changes and changes which affect mortgage interest rates, can have a large effect on level of investment in housing. For this reason, an important goal of Canadian housing has been to stimulate employment.[8] Often the response to recession has been to introduce measures to stimulate new residential construction.

This emphasis on macroeconomic goals has been criticized for distorting the operation of the housing market. Policies designed to immediately stimuate new construction, such as grants for first time home buyers, often advance purchase decisions which might have been undertaken later, leaving a slump at the end of the program. Moreover, the emphasis on new construction and home ownership often neglects the special needs of poorer households who occupy older housing, often as tenants. Finally, justification of housing programs on the basis of employment generation tends to ignore the opportunity cost of the program. Employment generated by a housing program may simply replace employment that would have been generated by some other government program or by private consumption and investment that might have been stimulated by a tax cut. Accordingly the federal Treasury Board (1976) recommends against considering indirect effects on employment and income in evaluating public programs.

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[8] For example, the full title of the National Housing Act of 1944 includes expansion of employment as an explicit goal of the legislation. (see Rose, 1980, 26, note 4).

Although macroeconomic considerations should not be the primary factors in assessing housing policy, developments in the housing market can have repercussions in the larger economy. Most analysts agree that a restrictive rent control program can reduce the supply of new rental construction. Removal of such a program could provide new investment opportunities.[9] Most macroeconomic models predict that such an event would lead to an expansion of aggregate demand, income and employment. Similarly, if the supply of housing does not respond quickly to changes in the level and composition of demand, shortages can develop which drive up the price of housing services. Unless other prices fall so as to compensate, this can lead to an increase in the general price level. Depending on the response of the monetary authorities, the effect can be either stagflation or accelerated inflation.[10] Thus policies which increase the efficiency of housing markets may have favorable macroeconomic effects.

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[9] Under some circumstances, to be discussed in Chapter III, removal of rent controls will not stimulate new construction.

[10] The analysis parallels that of oil price shocks. For simple expositions of macroeconomic theory, readers may consult a textbook such as Lipsey, Purvis and Steiner (1985).

4. Technical Progress

Technical progress refers to an improved ability to provide the goods and services people desire from a fixed stock of inputs. Technical progress usually shows up as increased productivity. In the residential construction industry, technical progress would include any improvement in construction or management techniques which allowed more housing units to be built for the same expenditure of human and capital resources.

Technical progress, or productivity growth, is the key to raising the real incomes of Canadians. Rental housing policy should encourage, or at least not discourage, innovation in the supply of housing. Strangely, this aspect of housing policy is not often discussed in the housing literature, and accordingly will not be emphasized here. It should be noted however that for many economists the promotion of technical progress is the chief jewel of the capitalist system of production.[11] A key characteristic of private markets with free entry is that all producers have a strong incentive to search out and introduce new technology. Competition leads to reduced prices to consumers and passes the benefits of technological improvement on to them. This suggests that maintenance of a vigorous private sector in rental housing markets might be an appropriate goal of public policy.

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[11] See Schumpeter (1942) for the classic statement.

C. Objectives for Rental Housing Policies

We have now applied four traditional criteria of economic performance to the operation of the housing market. Several of Stanbury's possible objectives of rent regulation could be justified by appeal to one or more of these criteria. Thus the goal of preventing rent gouging is an application of the criterion of fairness, one of the aspects of equity. The provision of affordable housing can be justified by appeal to equity and to efficiency, if there are important externalities involved in housing. Maintaining social diversity has a similar efficiency rationale.

Rent stabilization can be justified both on equity and efficiency grounds, although doubts may be expressed about the importance of the latter. Given the difficulties of finding new accommodation quickly in times of excess demand it may be perceived as unfair to pass on large rent increases to sitting tenants. For example Knetsch, Kahneman, and MacNeill (1984, 43) find both tenants and owners distinctly unsympathetic to rent increases in such circumstances. Rent stabilization can also be justified on efficiency grounds if rapid price increases cause an excessive amount of moving.

The grounds for treating security of tenure as a social goal are somewhat more obscure. Tenure is more secure the fewer are the grounds upon which it can be terminated. Under a system of rent regulation some provision must be made to prevent landlords from circumventing rent controls (see Stanbury, 1985, v.1, 3-19). This type of security of tenure is best viewed as a means to other ends, such as maintaining affordability.

Beyond ensuring the application of rent regulation, security of tenure provisions may be advocated to create for tenants a "psychological" security comparable to that enjoyed by homeowners (see Makuch and Weinrib, 1984). For example, Stanbury (3-14) cites a statement by the Federation of Metro Tenants Associations asserting that tenants should be allowed to remain in their premises except in four cases: malicious damage, persistent non-payment of rent, serious nuisance to neighbours, and occupancy by the landlord for his personal use.

This type of security of tenure limits the ability of tenants and landlords to negotiate individually on the terms of their contract. There is no strong case to be made for this on efficiency grounds.[12] Indeed Stanbury indicates many reasons why it may be inefficient. The base in equity is also unclear: compared with a homeowner with the same income, a tenant has saved less and hence sacrificed less previous consumption, enjoys more mobility, has fewer maintenance responsibilities and experiences less financial risk. Thus there is no obvious argument why he should enjoy

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12. Stanbury (3-33) points out that there are efficiency grounds to support arrangements which minimize the cost of resolving disputes, but these are independent of the details of the contract. One could also argue that market power of landlords allows them to dictate unfavorable terms to tenants; this argument presumes that landlords possess significant market power.

comparable security of tenure. The strongest basis for security of tenure provisions lies in an appeal to benevolence. Few people would like to live under circumstances where they are afraid to entertain friends or where the landlord regularily inspects their housekeeping arrangements: the golden rule suggests that we should not inflict similar conditions on others.

Thus five of Stanbury's six objectives of rent regulation have a basis in efficiency, equity, or both. The sixth refers directly to the efficiency goal, but is too narrow to capture the three components of efficiency discussed above. In this paper it will be replaced by the objectives of least cost production, availability and respect for other social goals. This leaves us with eight objectives for rental housing policy, namely:

1. Availability
2. Affordability
3. Prevention of Rent Gouging
4. Security of Tenure
5. Equity
6. Maintenance of Social Diversity and Integration
7. Provision of Rental Housing at Least Cost
8. Respect for other Social Goals.

These categories are not completely self-contained, nor are they exhaustive of all possible concerns about rental housing. Nevertheless, they capture most of the objectives implicit in the housing and rent control literature. In the next chapter we will investigate how achievement of these objectives might be measured and whether or not achievement of the objective is likely to be problematic in the future.

CHAPTER II

PROBLEMS PAST AND PRESENT

One of the fundamental questions addressed by this study is what problems are most likely to arise in attempting to meet housing policy objectives over the next 15 years. It seems reasonable to expect that the Inquiry will wish to recommend policies which are particularly well suited to emerging problems, although attention must always be paid to maintaining sufficient flexibility in housing policy to cope with unforeseen developments.

Before directly addressing this question, it is useful to consider which housing policy objectives are presently unmet and which have proved difficult to achieve in the past. That is the task of this chapter.

The chapter is organized into three parts. The first examines the evolution of the rental housing stock in Ontario since 1961. This time span is somewhat longer than that adopted in earlier submissions to the Inquiry. The longer perspective is valuable, however, because it encompasses a period of active growth in the housing stock during the 1960's as well as a period of difficulty in the mid-1970's and early 1980's. This allows us a better chance to separate permanent trends from temporary developments.

The second part of the chapter considers evidence on the level and rate of change in rents in Ontario over the same period. In general, the real burden of rental payments seems to have fallen over this period. We also examine the relationship between rent changes, the rate of inflation, and the vacancy rate.

The final part of the chapter considers each of the housing policy objectives identified in Chapter 1. For each objective, we consider first how achievement of the objective can be measured and secondly what evidence there is of difficulties in this area in the past and present. Prediction of future problems requires a theory about how rental markets operate and some evidence about their current state. This material is treated in Chapter III and hence discussion of probable future difficulties in rental markets is postponed to Chapter IV.

A. Evolution of the Rental Housing Stock

1. Changes in the Net Stock, 1961-85

In his Statistical Profile prepared for the Inquiry, Pringle (1985, ch. 2) provides an extensive description of Ontario's housing stock and sources of data concerning it. This section highlights those results and supplements them with additonal material.

Probably the best overview of Ontario's rental housing stock is obtained from the Census of Canada. Table 2.1 presents the basic data on occupied housing by structural type and tenure. Table 2.2 reports the tenancy ratio, that is the fraction of total dwelling units in a given class which is occupied by tenant households. Table 2.3 shows the distribution of the rental housing stock by structural type.

Although the majority of tenant households live in apartment buildings, this proportion of the tenant population peaked in 1976 at 73.4% of the total and declined to 71.2% by 1981. Almost three renters in ten occupy single family dwellings, and more than half of these are single detached houses. 10% of single detached houses, 38% of attached houses, 65% of duplexes and more than 90% of apartment units are rented. These data suggest that it is a mistake to focus exclusively on apartments in considering the supply of new rental housing.

Tenancy ratios were generally rising in housing of all structural types (except single detached) from 1961 until 1971. Between 1971 and 1976, however, there appears to have been a massive switch to ownership. Despite net additions to the total stock of single attached and detached housing, the number of rental units in these categories actually declined. Meanwhile, the number of owner occupied apartment units trebled. A considerable portion of this shift was reversed between 1976 and 1981, but 1981 tenancy ratios were still generally below their 1971 levels.

TABLE 2.1: OCCUPIED HOUSING STOCK BY STRUCTURAL TYPE AND TENURE
ONTARIO, 1961-1985. (000'S OF UNITS)

Structural Type By Tenure	1961	1966	1971	1976	1981	1985 (2)
Single Detached	1,141	1,233	1,366	1,494	1,691	1,777
Rented	144	142	162	136	163	172
Owned	996	1,091	1,203	1,358	1,528	1,606
Single Attached(1)	170	186	248	298	384	484 (3)
Rented	69	77	119	116	147	207
Owned	102	109	129	182	237	277
Apartments & Duplexes	325	453	603	819	870	- -
Rented	270	398	543	704	776	- -
Owned	55	56	60	116	94	- -
Duplexes	121	100	88	95	78	- - (3)
Rented	- -	- -	53	59	50	- -
Owned	- -	- -	35	37	28	- -
Apartments	204	353	515	724	792	841
Rented	- -	- -	490	645	726	771
Owned	- -	- -	26	79	66	70
Over 4 stories	- -	- -	- -	- -	481	- -
Rented	- -	- -	- -	- -	434	- -
Owned	- -	- -	- -	- -	47	- -
Under 5 stories	- -	- -	- -	- -	311	- -
Rented	- -	- -	- -	- -	292	- -
Owned	- -	- -	- -	- -	19	- -
Mobile	4.93	4.44	8.70	22.79	24.93	- -
Rented	0.39	0.49	1.11	2.44	3.70	- -
Owned	4.53	3.94	7.61	20.35	21.24	- -
Total Occupied Stock	1,641	1,877	2,225	2,635	2,970	3,128 (4)
Rented	484	617	825	958	1,091	1,154
Owned	1,157	1,259	1,400	1,676	1,879	1,974
Vacant Stock	59	65	86	127	127	- -
Collective Dwellings	7	5	5	5	9	- -
Total Stock	1,707	1,947	2,317	2,766	3,106	- -

NOTES:
1. Single attached include doubles, rows and dwellings attached to non-residential buildings. See Note 3.
2. 1961-1981 figures are for mid-year. 1985 estimates are for the end of the first quarter. The 1985 estimates are based on estimates presented in Table 2.5 and the assumption that the tenure split by structural type was the same in 1985 as in 1981.
3. For 1985, duplexes are included in single attached.
4. 1981 mobile figures were used in the 1985 total estimates.

SOURCE: Derived from Canadian Census, Statistics Canada, various years, and CMHC Canadian Housing Statistics.

TABLE 2.2: TENANCY RATIOS; OCCUPIED HOUSING STOCK BY STRUCTURAL TYPE ONTARIO, 1961-1981

Structural Type	1961	1966	1971	1976	1981
Single Detached	12.64	11.50	11.87	9.13	9.65
Single Attached(1)	40.33	41.45	47.90	38.84	38.37
Apartments & Duplexes	83.19	87.73	90.04	85.89	89.23
Duplexes	- -	- -	60.68	61.44	64.54
Apartments:	- -	- -	95.05	89.11	91.66
under 5 stories	- -	- -	- -	- -	93.86
over 5 stories	- -	- -	- -	- -	90.32
Mobile	7.96	11.14	12.70	10.71	14.84
Total Occupied Stock	29.47	32.88	37.08	36.38	36.73

NOTES: 1. Single attached include doubles, rows and dwellings attached to non-residential buildings.

SOURCE: Derived from Canadian Census, Statistics Canada, various years.

TABLE 2.3: DISTRIBUTION OF THE OCCUPIED RENTAL STOCK; BY STRUCTURAL TYPE; ONTARIO, 1961-1981. (PERCENTAGE)

Structural Type	1961	1966	1971	1976	1981
Single Detached	29.82	22.98	19.65	14.23	14.96
Single Attached(1)	14.21	12.47	14.39	12.08	13.52
Apartments & Duplexes	55.89	64.47	65.82	73.44	71.15
Duplexes	- -	- -	6.47	6.12	4.60
Apartments	- -	- -	59.36	67.31	66.55
Mobile	0.08	0.08	0.13	0.25	0.34
Total Rented Stock (000's)	483.52	617.09	825.15	958.37	1,090.84

NOTE: 1. Single attached include doubles, rows and dwellings attached to non-residential buildings.

SOURCE: Derived from Canadian Census, Statistics Canada, various years, Shifts in tenure of this magnitude can have a major impact on the stock of rental housing. Table 2.4 reports changes in the rental stock for four five-year periods from 1961/66 to 1976/81. It also attempts to disentangle the contribution made by changes in the total stock of housing from the contribution made by increasing tenancy ratios. Thus between 1976 and 1981 the stock of single detached dwellings occupied by tenants rose by 26,820. 18,450 of these additional rental units can be attributed to a general increase in the stock of single detached houses, and 8,360 can be attributed to the fact that a greater fraction of single detached dwellings was rented in 1981 than in 1976.

In each five year period, the stock of rental housing increased by about 133 thousand units, except between 1966 and 1971 when the increase was 208 thousand. Almost 100 thousand rental units were lost due to the tenancy effect between 1971 and 1976, while in other periods, increased tenancy has often supplied over 30 thousand units per 5-year period. The effect of shifting tenancy ratios is obscured in the rows entitled "Total Rental" because of the increasing share of apartments in the total housing stock.

Two conclusions may be drawn from the data in Table 2.3. The first is that estimates of the total rental stock are affected by shifts between ownership and rental housing. Thus a fall or slow growth in the stock of rental housing may not signify a housing problem if it merely reflects a shift from tenancy to ownership.

TABLE 2.4: ESTIMATED CONTRIBUTIONS TO THE NET CHANGE IN THE OCCUPIED RENTAL STOCK (1); ONTARIO, 1961-1981. (IN 000'S OF UNITS)

Structural Type By Source	1961-66	1966-71	1971-76	1976-81
Single Detached				
Total Change	-2.36	20.32	-25.73	26.82
stock effect	11.14	15.50	13.53	18.45
tenancy effect	-13.51	4.82	-39.26	8.36
Single Attached(1)				
Total Change	8.25	41.83	-3.05	31.71
stock effect	6.28	27.84	21.67	33.31
tenancy effect	1.98	13.99	-24.72	-1.60
Apartments & Duplexes				
Total Change	127.58	145.30	160.66	72.37
stock effect	109.93	133.08	190.18	44.13
tenancy effect	17.65	12.22	-29.51	28.23
Duplexes				
Total Change	- -	- -	5.32	-8.52
stock effect	- -	- -	4.62	-11.19
tenancy effect	- -	- -	0.70	2.68
Apartments				
Total Change	- -	- -	155.35	80.88
stock effect	- -	- -	192.12	61.62
tenancy effect	- -	- -	-36.77	19.26
Mobile				
Total Change	0.10	0.61	1.34	1.26
stock effect	-0.05	0.51	1.65	0.27
tenancy effect	0.15	0.10	-0.31	0.99
Total Occupied Stock				
Total Change	133.57	208.06	133.22	132.47
stock effect	73.51	122.06	150.26	122.51
tenancy effect	60.06	86.00	-17.04	9.95

Notes: 1.The stock effect is the 5 year change in the total occupied stock by structural type multiplied by the average tenancy ratio for that period and structural type.
The tenancy effect is the 5 year change in the tenancy ratio by structural type multiplied by the the average total occupied stock for that period and structural type.

Source: Derived from Table 2.1

The second conclusion is that the rental housing market has experienced very rapid rates of growth at certain times in the recent past. Table 2.5 expresses this growth as a percentage of the relevant stock. Thus between 1966 and 1971 the total rental stock grew by almost 6% per year and the stock of rented single attached dwellings rose by 9% per year. These data suggest that it is fundamentally misleading to consider the stock of rental housing a constant or slowly adjusting quantity.

2. Market Segmentation

The total rental stock is made up of buildings of varying age and size. Recently, considerable attention has been devoted to the distinction between high rise and low rise apartment buildings. Low rise buildings constitute the most important source of modest accommodation suitable for low income, small households. Peter Barnard Associates (1985) report that such low rise buildings accounted for over one-quarter of Ontario's rental stock in 1981. The remaining stock consisted of high rise (40%) and other units, primarily single, semi-detached, duplexes and row houses (33%).

TABLE 2.5: AVERAGE ANNUAL GROWTH RATES; OCCUPIED HOUSING STOCK; BY STRUCTURAL TYPE & TENURE; ONTARIO, 1961-81. (PERCENTAGE)

Structural Type/Tenure	1961-66	1966-71	1971-76	1976-81
Single Detached	1.57	2.06	1.82	2.50
Rented	-0.33	2.71	-3.40	3.65
Owned	1.83	1.98	2.45	2.38
Single Attached(1)	1.74	5.96	3.74	5.22
Rented	2.30	9.07	-0.52	4.96
Owned	1.36	3.51	7.12	5.38
Apartments & Duplexes	6.90	5.87	6.32	1.20
Rented	8.04	6.42	5.32	1.98
Owned	0.38	1.54	13.98	-4.13
Duplexes	-3.70	-2.55	1.66	-4.03
Rented	- -	- -	1.92	-3.09
Owned	- -	- -	1.27	-5.63
Apartments	11.61	7.83	7.04	1.82
Rented	- -	- -	5.66	2.39
Owned	- -	- -	25.30	-3.46
Mobile	-2.08	14.43	21.23	1.82
Rented	4.73	17.47	17.17	8.68
Owned	-2.76	14.05	21.76	0.86
Total Occupied Stock	2.72	3.47	3.43	2.42
Rented	5.00	5.98	3.04	2.62
Owned	1.71	2.14	3.66	2.31

NOTES: 1. Single attached include doubles, rows and dwellings attached to non-residential buildings.

SOURCE: Derived from Canadian Census, Statistics Canada, various years.

Low rise buildings share a number of characteristics which distinguish them from other forms of rental accommodation. Again according to Peter Barnard Associates, these buildings are typically older, than average, located in the central area of large cities and owned by individuals or corporations with small portfolios. Further, the operating costs of these buildings may form a larger than average fraction of gross revenues.

The presence of many types of landlord and building can be important in considering the effects of alternative public policies. The effect of policy changes may differ from one category to another.

3. Socially Assisted Housing

For many years the federal and provincial governments of Canada have sponsored programs to assist in the provision of rental housing, especially to renters with low incomes. These programs have been summarized for the Inquiry in Chant (1985, ch.1). It is interesting to investigate what impact these programs have had on the total stock of rental units in Ontario.

Table 2.7 reports the stock of socially assisted housing in Ontario for various years, classified by structural type and public program. These data were made available to the Inquiry by the Ontario Ministry of Municipal Affairs and Housing and have not been previously published. Table 2.8 reports the average annual growth in the stock of socially assisted housing and Table 2.8A summarizes the previous tables and shows the contribution of socially assisted housing to the rental stock and growth in rental stock for four inter-censal periods.

Table 2.8A indicates that socially assisted housing has increased its share of the total rental stock from 2.3% in 1961 to 12.7% in 1981. Slightly over half of this total (6.9%) was accounted for by public housing, in which all units were originally designated for subsidized renters. The bulk of the remaining units was accounted for by limited dividend units (2.4%) and the non-profit and co-operative housing programs (2.3%). As noted by many authors, the non-profit and co-operative housing programs differ from the others in providing only a small fraction of their units to low-income renters.

Socially assisted housing accounts for an even larger share of the net additions to the rental stock. Table 2.8A shows that between 1961 and 1966, socially assisted housing accounted for only 7.1% of the net increase in the rental housing stock, while between 1971 and 1976 more than 1 new rental unit in three (37.8%) was socially assisted. Between 1976 and 1981 the increase in socially assisted units was reduced, and they accounted for only 20.1% of the total increase, a level similar to that observed between 1966 and 1971. Since 1981 total starts have declined while socially assisted starts have increased (Table 2.8) so the share of assisted housing will probably rise once again.

TABLE 2.6: STOCK CHANGE ESTIMATES; ONTARIO, 1961-1985.

Structural Type	1961-66	1966-71	1971-76	1975-81	1981-85 (4)
	(000's of Units)				
CMHC Completions: Total	256.4	343.7	463.5	353.9	185.8
Structural Type Estimates:(1)					
Single Detached	124.6	131.3	174.7	135.7	102.5
Attached(2)	26.4	46.4	83.9	95.3	26.9
Apartments	105.4	166.0	204.4	122.9	56.4
Census 5-Year Change: Total	236.3	344.7	395.0	333.1	157.8
Single Detached	92.3	132.6	128.9	196.5	86.4
Attached	-5.3	50.2	57.5	68.5	22.5
Apartments	149.4	161.8	208.6	68.0	48.9
Net Stock Loss: Total	20.1	-1.0	68.5	20.8	28.0
Single Detached	32.3	-1.3	45.8	-60.8	16.1
Attached	31.7	-3.8	26.4	26.8	4.4
Apartments	-44.0	4.2	-4.2	54.9	7.5
	(Percentage)				
Loss Factor: Total(3)	1.23	-0.05	3.09	0.79	0.95
Single Detached	2.83	-0.11	3.35	-4.07	0.95
Attached	10.89	-0.46	7.86	6.81	0.95
Apartments	-21.56	1.19	-0.82	7.58	0.95

Notes:
1. Completions by structural type for 1961-77 are derived by lagging single detached and semi-detached starts by 6 months; row and apartment starts by 12 months.
2. Includes rows and duplexes.
3. Loss factor equals lost units/stock at period's start. 1981-85 estimates are based on the unweighted average of the previous 20 years.
4. The 1961-66 through 1975-81 time periods are June to June; the 1985 figures are for January through March.

Sources: Derived from Canadian Census, Statistics Canada, various years and tables. Canadian Housing Statistics, various years. Ontario Housing Market, Quarterly Review, Ontario Ontario Ministry of Municipal Affairs and Housing.

TABLE 2.7: SOCIALLY-ASSISTED HOUSING STOCK BY PROGRAM; ONTARIO, 1961-1984. (IN UNITS)

PROGRAM	1961	1966	1971	1976	1981	1984
PUBLIC HOUSING (CURRENT O.H.C. PORTFOLIO)						
SINGLE	971	1,238	1,521	2,175	2,175	2,175
SEMI-DETACHED	312	1,091	2,464	3,363	3,363	3,377
ROW	2,003	3,884	12,963	16,430	16,435	16,435
ROW STACKED	0	215	417	785	785	785
APT/ELEVATOR	80	763	14,991	36,865	37,208	37,257
APT/WALK-UP	667	2,314	7,707	15,033	15,320	15,580
HOSTEL UNITS	0	0	80	355	355	355
TOTAL	4,033	9,505	40,143	75,006	75,641	75,964
LIMITED DIVIDEND (EXCLUDING MUNICIPAL NON-PROFIT)						
SINGLE	50	50	50	65	65	65
SEMI-DETACHED	30	48	54	69	69	69
ROW	72	172	252	258	510	510
ROW STACKED	0	0	0	0	0	0
APT/ELEVATOR	4,450	6,425	9,234	21,376	24,542	24,542
APT/WALK-UP	163	228	650	1,178	1,178	1,178
HOSTEL UNITS	0	45	1,886	3,162	3,162	3,162
TOTAL	4,765	6,968	12,126	26,108	29,526	29,526
NON-PROFIT						
SINGLE	0	5	7	85	205	581
SEMI-DETACHED	496	544	544	734	1,023	1,130
ROW	378	394	470	524	2,638	4,762
ROW STACKED	0	0	0	0	51	162
APT/ELEVATOR	606	2,297	2,751	3,726	11,080	22,401
APT/WALK-UP	700	798	991	1,401	4,211	6,187
HOSTEL UNITS	0	102	438	2,353	4,318	6,383
TOTAL	2,180	4,140	5,201	8,823	23,526	41,606
CO-OPERATIVES						
SINGLE	0	0	0	4	1,030	5,165
SEMI-DETACHED	0	0	0	14	240	291
ROW	0	0	0	257	2,201	4,136
ROW STACKED	0	0	0	0	232	1,065
APT/ELEVATOR	0	0	0	95	381	387
APT/WALK-UP	0	0	0	94	974	974
HOSTEL UNITS	0	0	0	1	23	23
TOTAL	0	0	0	465	5,081	12,041
OTHER PROGRAMS (1)						
SINGLE	0	0	0	0	0	0
SEMI-DETACHED	0	0	0	0	0	0
ROW	0	0	0	0	0	44
ROW STACKED	0	0	0	0	0	0
APT/ELEVATOR	0	0	5,744	6,573	11,631	12,167
APT/WALK-UP	0	0	854	854	1,080	1,195
HOSTEL UNITS	0	0	146	146	146	146
TOTAL	0	0	6,744	7,573	12,857	13,552
ALL PROGRAMS						
SINGLE	1,021	1,293	1,578	2,329	3,475	7,986
SEMI-DETACHED	838	1,683	3,062	4,180	4,695	4,867
ROW	2,453	4,450	13,685	17,469	21,784	25,887
ROW STACKED	0	215	417	785	1,068	2,012
APT/ELEVATOR	5,136	9,485	32,720	68,635	84,842	96,754
APT/WALK-UP	1,530	3,340	10,202	18,560	22,763	25,114
HOSTEL UNITS	0	147	2,550	6,017	8,004	10,069
TOTAL	10,978	20,613	64,214	117,975	146,631	172,689

Note: 1. Other programs include Pre-and Post-1979 Municipally Assisted;
Assisted Rental 1975; Private Assisted Rental.

Source: Derived from estimates supplied by Field Operations, MCMAH.

TABLE 2.8: SOCIALLY-ASSISTED HOUSING STOCK BY PROGRAM; AVERAGE ANNUAL INCREASE; ONTARIO, 1961-1984. (IN UNITS)

PROGRAM	1962-66	1967-71	1972-76	1977-81	1982-84
PUBLIC HOUSING (CURRENT O.H.C. PORTFOLIO)					
SINGLE	53	57	131	0	0
SEMI-DETACHED	156	275	180	0	5
ROW	376	1,816	693	1	0
ROW STACKED	43	40	74	0	0
APT/ELEVATOR	137	2,846	4,375	69	16
APT/WALK-UP	329	1,079	1,465	57	87
HOSTEL UNITS	0	16	55	0	0
TOTAL	1,094	6,128	6,973	127	108
LIMITED DIVIDEND (EXCLUDING MUNICIPAL NON-PROFIT)					
SINGLE	0	0	3	0	0
SEMI-DETACHED	4	1	3	0	0
ROW	20	16	1	50	0
ROW STACKED	0	0	0	0	0
APT/ELEVATOR	395	562	2,428	633	0
APT/WALK-UP	13	84	106	0	0
HOSTEL UNITS	9	368	255	0	0
TOTAL	441	1,032	2,796	684	0
NON-PROFIT					
SINGLE	1	0	16	24	125
SEMI-DETACHED	10	0	38	58	36
ROW	3	15	11	423	708
ROW STACKED	0	0	0	10	37
APT/ELEVATOR	338	91	195	1,471	3,774
APT/WALK-UP	20	39	82	562	659
HOSTEL UNITS	20	67	383	393	688
TOTAL	392	212	724	2,941	6,027
CO-OPERATIVES					
SINGLE	0	0	1	205	1,378
SEMI-DETACHED	0	0	3	45	17
ROW	0	0	51	389	645
ROW STACKED	0	0	0	46	278
APT/ELEVATOR	0	0	19	57	2
APT/WALK-UP	0	0	19	176	0
HOSTEL UNITS	0	0	0	4	0
TOTAL	0	0	93	923	2,320
OTHER PROGRAMS (1)					
SINGLE	0	0	0	0	0
SEMI-DETACHED	0	0	0	0	0
ROW	0	0	0	0	15
ROW STACKED	0	0	0	0	0
APT/ELEVATOR	0	1,149	166	1,012	179
APT/WALK-UP	0	171	0	45	38
HOSTEL UNITS	0	29	0	0	0
TOTAL	0	1,349	166	1,057	232
ALL PROGRAMS					
SINGLE	54	57	150	229	1,504
SEMI-DETACHED	169	276	224	103	57
ROW	399	1,847	757	863	1,368
ROW STACKED	43	40	74	57	315
APT/ELEVATOR	870	4,647	7,183	3,241	3,971
APT/WALK-UP	362	1,372	1,672	841	784
HOSTEL UNITS	29	481	693	397	688
TOTAL	1,927	8,720	10,752	5,731	8,686

Note: 1. Other programs include Pre-and Post-1979 Municipally Assisted; Assisted Rental 1975; Private Assisted Rental.

Source: Derived from estimates supplied by Field Operations, MCMAH.

TABLE 2.8A: CONTRIBUTION OF SOCIALLY ASSISTED HOUSING TO THE RENTAL STOCK AND GROWTH IN THE RENTAL STOCK, ONTARIO, 1961-81.

(A) Percentage of the Rental Units that were Socially-Assisted.

Program	1961	1966	1971	1976	1981
Public Housing	0.8	1.5	4.9	7.8	6.9
Limited Dividend	1.0	1.1	1.2	2.4	2.4
Non-Profit	0.5	0.7	0.6	0.7	1.8
Co-operatives	0.0	0.0	0.0	.0	0.5
Other Programs	0.0	0.0	0.8	0.8	1.2
Total Socially Assisted	2.3	3.3	7.5	11.7	12.7

(B) Contribution to the growth in the Rental Stock

Program	1961/66	1966/71	1971/76	1976/81
Public Housing	5,472	30,558	34,588	635
Limited Dividend	2,158	3,317	12,706	3,418
Non-Profit	1,858	725	1,707	12,738
Co-operatives	0	0	464	4,594
Other Programs	0	6,598	829	5,284
Total Socially-Assisted	9,488	41,198	50,294	26,669
Total Occcupied Rental Stock	133,570	208,060	133,220	132,470
Socially-Assisted as Percentage of Total	7.1	19.8	37.8	20.1

NOTES: 1. Hostel Units are excluded.

SOURCE: Computed from Table 2.7.

We can conclude from this data that socially assisted housing has become prominent in supplying rental accommodation. We should not conclude, however, that this is entirely the result of rent control, since the share of socially assisted housing was already growing by 1971. Nor can we conclude that socially assisted housing has totally displaced the private sector in providing new rental housing.

4. Boarders and Lodgers

A final observation to be made is that the data reported above do not include allowances for individuals and families who rent rooms or suites in private houses, but who do not constitute households according to Census definitions. These are boarders and lodgers. They comprise only a small segment of the total renting population, but they are often the ones with lowest income and potentially most need for assistance. Although they are technically covered under Ontario's Rent Review legislation, they have been excluded from most of the discussion in this paper because the Landlord and Tenant Act does not provide them with the same security of tenure enjoyed by other renters. Consequently, rent review legislation has been largely ineffective in controlling their rents. It should be borne in mind, however, that lodging accommodation may be a relatively close substitute for the rental accommodation studied in this report.

5. Demolitions and Conversions

Although there is no necessary connection between the number of dwelling units in a particular price range and the difficulty of finding accommodation (since availability is determined by the excess of supply over demand), there is evidence of loss of low income rental units through conversion to ownership and luxury rental. Klein and Sears (1983, v.4.1, p.13) conclude that the City of Toronto lost 1.2% of its rental housing stock through demolition and conversion to condominiums over the period 1976-80. Although this was more than offset by new additions to the rental stock, these may have been larger or more expensive units. The same study indicates a net loss of 9,400 units (or 3.6% of the occupied dwelling stock) in the owner-tenant category.[1] These dwellings are frequently the source of low income rental accommodation. Thus small changes in the net rental stock may mask a noticeable decline in lower quality, lower priced units suitable for lower and middle income households.

The decline noted by Klein and Sears appears to have continued, particularly in the City of Toronto. Comay (1984, 25) claims that the existing stock of moderate rental apartments is at some risk, with an actual or potential loss of 7,500 medium or moderate rent units over the period 1980-

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[1] Owner-Tenant dwellings are not a Census category. They consist of dwelling units in which the tenants' quarters are not self-contained.

84. This loss is said to have occurred "through conversion to ownership housing, luxury renovation, prospective demolition or other reasons". Similarly, the Metropolitan Toronto Task Force on Housing for Low Income Single People (1983, 1) cites with approval the Chairman of Metro Council who claimed that the problem of provision of housing for low income singles has become "even more critical as the rooming and boarding house stock is depleted". A recent study for the Ministry of Housing (Ekos, 1985); concluded that at least 30% of the low rise rental stock in Hamilton, Ottawa, and Toronto is "in jeopardy" over the next 10 years. Further evidence and discussion is found in Peter Barnard and Associates (1985).

B. Rent Levels and Changes, 1961-1985

1. The Rent Component of the Consumer Price Index

The only consistent annual data about rent increases since 1961 come from the Consumer Price Index (CPI). One element of the CPI is the so-called rent component. This measures changes in the rent paid by respondents to the Labour Force Survey conducted by Statistics Canada. It appears to be seriously biased downwards, possibly because it underestimates rent increases which occur between tenancies. Actual rent increases may be between half again and twice as much as those indicated by the rental component.[2] Nevertheless, the CPI data help us to identify periods of rapid rent increases in the past.

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[2] For example, between 1973 and 1984, the CPI rent

Table 2.9 indicates that there have been three periods of rapid increase in rents as indicated by the rental component of the CPI. These occurred in 1966-68, 1974-76, and 1981-83. In each case, the episode of rapid rent increases followed several years in which rents increased much less rapidly than the general price level. For example, in the three years preceding the 1974-76 episode, the general rate of inflation was 7.5%, 10.9% and 10.8% while the rent component grew by only 1.4%, 1.6% and 2.6%. Accordingly, the rent component fell relative to the general price level.

The real rent for an apartment is the quantity of other goods and services a household could have bought with the money it actually paid for rent. It can be measured by the ratio which the CPI rent component bears to the overall price index. Table 2.9 indicates that in the three years leading up to the 1974-76 episode, real rents declined by 5.7%, 8.4% and 7.4% respectively. Even given the downward bias in the CPI rent component, it is difficult to escape the conclusion that a large fraction of the nominal rent increases of 1974-76 was a catching up for previous inflation.

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component for Toronto CMA rose from 68.2 to 121.9, an increase of 89.3%. Between December, 1973, and April, 1984, the average rent on two bedroom units in the CMHC vacancy survey rose from $207 to $465, an increase of 124.6%. The percentage CMHC rent increases were 39.5% greater than the percentage increase in the rental component of the CPI.

2. The CMHC Vacancy Survey

A second source of information about rent increases is the CHMC apartment vacancy survey. Table 2.10, reproduced from Stanbury and Vertinsky (1985, vl, 6-10), reports the annual rates of change in the rents for Toronto apartments covered in the CMHC vacancy survey. As noted by Stanbury and Vertinsky, these average rents were gathered from three different samples. It is especially important to notice that the increases from 1974 to 1977 are based on asking rents for vacant units. They are therefore most likely to show a rapid increase in times of excess demand. Nevertheless, these data support the dramatic statements made by proponents of rent control in the period leading up to the 1975 election. Note particularily the 36.2% increase in the asking price for two bedroom apartments in 1974 and the 29.8% increase for one bedroom apartments in early 1975. Since these data are averages, the extreme cases reported in the press are easily believed.

TABLE 2.9: RENT INDEXES; TORONTO CMA, 1961-1984. (PERCENTAGE)

Year	Price Indexes, 1981 = 100			Annual Rates of Change (1)		
	All	Rents Toronto CMA		All	Rents Toronto CMA	
	Items (2)	Nominal	Real	Items (2)	Nominal	Real
1961	29.5	53.6	182.0	- -	- -	- -
1962	29.8	53.8	180.5	1.20	0.40	-0.79
1963	30.3	54.0	177.9	1.78	0.30	-1.45
1964	30.9	54.2	175.5	1.75	0.40	-1.33
1965	31.6	54.7	172.8	2.48	0.89	-1.55
1966	32.8	56.2	171.3	3.72	2.84	-0.85
1967	34.0	58.6	172.5	3.59	4.29	0.67
1968	35.4	61.0	172.4	4.07	4.02	-0.05
1969	37.0	63.2	171.1	4.50	3.69	-0.77
1970	39.3	64.8	165.0	6.29	2.54	-3.53
1971	41.2	66.2	160.7	4.80	2.07	-2.61
1972	44.3	67.1	151.6	7.54	1.40	-5.71
1973	49.1	68.2	138.8	10.91	1.58	-8.42
1974	54.4	70.0	128.6	10.80	2.62	-7.38
1975	58.5	74.2	126.8	7.51	6.05	-1.35
1976	62.9	78.7	125.1	7.52	6.07	-1.35
1977	67.9	83.1	122.3	7.95	5.55	-2.22
1978	73.9	87.2	117.9	8.84	4.94	-3.58
1979	80.7	91.0	112.8	9.20	4.40	-4.39
1980	88.9	95.0	106.8	10.16	4.36	-5.26
1981	100.0	100.0	100.0	12.49	5.30	-6.39
1982	110.8	107.3	96.9	10.80	7.35	-3.12
1983	117.2	115.4	98.5	5.78	7.52	1.65
1984	122.3	121.9	99.7	4.35	5.62	1.21

Notes: 1. The annual rate of change for 1962 is for the period 1961-62 etc.
2. Consumer Price Index for Canada.

Source: Consumer Price Indexes, Statistics Canada

TABLE 2.10: 12 MONTH RENT INCREASES; TORONTO AREA, 1974-1985. (PERCENTAGE) (1)

	City of Toronto		Metro Toronto		Toronto CMA	
Date (2)	1 bdrm	2 bdrm	1 bdrm	2 bdrm	1 bdrm	2 bdrm
1974 Dec.	17.1	4.1	- -	- -	23.1	36.2
1975 April	20.7	29.8	- -	- -	15.0	26.7
Oct.	18.9	17.8	- -	- -	8.5	-2.5
1976 April	4.4	0.3	- -	- -	5.1	-2.1
Oct.	-5.6	-6.6	- -	- -	4.8	6.6
1977 April	10.5	-0.6	- -	- -	7.5	6.5
Oct.	11.3	5.5	- -	- -	2.9	0
1978 April	- -	- -	- -	- -	- -	- -
Oct.	1.1	2.8	- -	- -	2.4	2.1
1979 April	- -	- -	- -	- -	- -	- -
Oct.	9.0	8.7	8.8	7.5	8.5	7.4
1980 April	7.4	5.9	7.4	7.9	7.2	7.7
Oct.	6.0	5.1	5.2	5.9	5.5	6.6
1981 April	8.2	4.5	7.0	6.2	7.1	6.8
Oct.	8.6	7.6	9.3	9.0	9.7	9.5
1982 April	9.2	17.0	10.0	11.8	10.1	11.7
Oct.	10.5	16.3	10.9	12.1	10.8	11.8
1983 April	7.3	7.6	8.9	9.4	8.6	8.9
Oct.	7.2	5.5	7.0	6.3	6.6	6.2
1984 April	7.7	5.0	5.9	4.7	5.8	4.9
Oct.	7.1	6.2	6.0	4.9	6.2	5.5
1985 April	6.0	6.4	6.4	6.8	6.5	6.5

NOTES: 1. For privately initiated buildings of 6 or more units. Excludes units built within 6 moths of the survey date

2. 1974 - Oct. 1977 based on sample asking rents for vacant units. Oct. 1978 - Oct. 1981 based on vacant and occupied units sampled. April 1982 - April 1985 based on a subsample of rent survey where a unit has been included in at least 3 consecutive surveys.

SOURCE: Rental Apartment Vacancy Survey, CMHC, Toronto Branch. Various issues. Found in Stanbury 1985, p. 6-10.

As a guide to long term trends in rents, the CMHC data are also flawed, but in the opposite direction to the CPI rent component. Although they are standardized for the number of bedrooms, the CMHC data can show an increase in average rents if the quality of apartments rises. In particular, if there is a shift in the composition of the rental stock towards higher priced, more luxurious apartments, the average rents will be pulled upwards. A second problem is that the average rents reported before 1978 are not strictly comparable to those reported after 1977. Nevertheless, it appears that real rents in Toronto have fallen since 1973. Table 2.11 compares the average rents paid for apartments in the Toronto CMA in December, 1973, and October, 1984. Expressed in 1984 dollars, average rents fell from $431 to $404 for one bedroom apartments and from $515 to $479 for two bedroom apartments.

3. Determinants of Rent Changes

The previous discussion makes it clear that rapid changes in rents are associated with previous bursts of inflation in the general price level. Rapid changes in rents are also associated with low vacancy rates.[3] For reasons discussed by Rosen and Smith (1983, 783), the rents paid by sitting tenants are slow to adjust to market conditions. For this reason the change in rents between 1983 and 1984 (say) depends largely on the rate of inflation and vacancy rates experienced in previous years. The importance of this effect is illustrated in Table 2.12, which reports the results of a regression similar to Smith's (1974). This table relates changes in the rent component of the Toronto CPI to the vacancy and inflation rates experienced in the previous two years.[4]

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[3] See Smith (1974) and Rosen and Smith (1983) for evidence and discussion.

Several important observations can be drawn from this table. First, the low standard error on the coefficient of the change in CPI lagged twice indicates that rent increases certainly respond to past inflation, but with a significant lag. The sum of the two coefficients (0.2) on changes in the CPI indicates that an increase of 10% in the rate of inflation (say from 7% per year to 7.7% per year) is associated eventually with a 2% increase in the rate of rent increase (say from 5% per annum to 5.1% per annum).

Secondly, the coefficient of -1.4 on the sum of the vacancy terms indicates that vacancies have a profound effect on rent increases. An increase of 10 percentage points in the vacancy rate (say from 1.0% to 1.1%) is associated with a reduction of 14% in the rate of increase in rents (say from 5% to 4.3%).

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[4] This model was fit for descriptive purposes. No claim is made that it is the "best" that could be devised.

TABLE 2.11: NOMINAL AND REAL RENTS; TORONTO CMA, 1973-1984

	Average Rent			Percentage Change	
	Dec. 1973		Oct. 1984		
Unit Size	$1973	$1984	$1984	Nominal	Real
Bachelor	162	403	333	105.56	-17.46
1 Bedroom	173	431	404	133.53	-6.23
2 Bedroom	207	515	479	131.40	-7.08
3 Bedroom	258	643	562	117.83	-12.53
Consumer Price Index (1981=100)					
1973	49.11				
1984	122.30				

Source: Derived from CMHC Apartment Vacancy Survey and the Consumer Price Index, Statistics Canada.

TABLE 2.12: DETERMINANTS OF RENT CHANGES; TORONTO, 1965-1984. (1)

Regressors	Coefficient	Standard Error	T-Statistic
Change in CPI:			
lagged once	-0.1083	0.0833	-1.30
lagged twice	0.2997	0.0855	3.51
Vacancy Rate:			
lagged once	-1.4312	0.2827	-5.06
lagged twice	-0.0019	0.2405	-0.81
Constant	5.5732	1.2784	8.34
R-sq	0.9257		
Corrected R-sq	0.9059		
Standard Error	0.0059		
Durbin Watson	1.4603		

Notes: 1. Dependent variable is the percentage change in CPI rent component

2. The effect of rent control was tested by calculating an unconstrained regression in which a rent control dummy variable was entered along with its interactions with lagged CPI changes and lagged vacancy rates. The hypothesis of no effect was accepted in a likelihood ratio test at the 10% significance level.

Source: Derived from CMHC, Rental Apartment Vacancy Surveys and Statistics Canada, Consumer Price Index.

It is possible to test whether the presence of rent control has seriously altered the relationship between changes in the rental component of the CPI, vacancy rates and inflation. Using conventional statistical tests, the hypothesis that rent control did not affect this relationship is accepted.

This brief review of rent increases establishes that there have been periods of rapid rent increases in the past, that these periods have been associated with preceding periods of low vacancies and bursts of rapid inflation in the general price level, and that the level of rents for comparable units, when expressed in current prices, was lower in 1984 than in 1973.

C. Past and Present Performance

In this section we investigate which of the objectives for rental housing policy have posed problems in the past or appear to be a problem in the present. For each objective we consider first whether an appropriate indicator of success is available, and secondly whether problems in the achievement of the objective exist.

1. Availability

In Chapter I, rental housing was said to be available if individuals and families can easily obtain accommodation suitable to their needs at the prevailing rent for housing of similar size and quality. When a household cannot obtain suitable accommodation because it cannot afford the rent, it is said to have an affordability problem rather than an availability problem. Affordability is considered in the next subsection.

Ready availability of rental housing of all sizes and quality levels is essential if the housing stock is to be used efficiently. When suitable accommodation is not readily available, households will tend to insist on remaining in their current, "unsuitable" homes. For example, couples whose children have left home will be inclined to remain in excessively large apartments or houses. Similarly, when housing is unavailable, households presented with employment opportunities distant from their present homes may be unable to accept them without incurring high or prohibitive commuting costs.

The availability of housing can be measured by vacancy rates or the length of waiting lists for preferred accommodation. The low vacancy rates and long waiting lists for public housing observed recently indicate that there is a growing problem of availability.

Data on vacancy rates in apartment buildings are available for many Ontario cities through the CMHC vacancy survey. The strengths and weaknesses of these data are discussed by Pringle (1985, 198-203). The main limitations arise from the universe sampled; it excludes apartment structures of fewer than 6 units and all other forms of rental units. Nevertheless, the changes in the vacancy data can be accepted as reasonably good indicators of changes in the availability of rental housing.[5]

The CMHC data are summarized in Table 2.13. The longest data series, dating back to 1963, is for Metropolitan Toronto. Data for other urban areas are available for shorter time spans.

The first conclusion to be drawn from Table 2.13 is that there is normally a great deal of variation in vacancy rates, both over time and space. In the pre-control period, vacancy rates in Toronto ranged from 1.0 to 4.4 and in 1973 vacancy rates ranged from 1.8 in Toronto to 10.45 in Sudbury. There is also great variation in vacancy rates within the large CMA's. The CMHC Local Housing Report for Toronto, April, 1985, shows an average vacancy rate of 0.5 for the Toronto CMA, but sub-regional vacancy rates range from 0.1 in Etobicoke to 1.5 in the western fringe of the CMA.

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5. In a recently completed study, Mascall (1985) reports a survey conducted to determine the characteristics of the rental accommodation available in several Ontario Urban Centres. He finds that units which would be classified as vacant in the CMHC survey often account for less than one quarter of available accommodation. Unfortunately no historical data are available to compare with these results. The Mascall results indicate that one should be careful not to interpret CMHC vacancy rates as a close description of the choices facing those searching accommodation.

TABLE 2.13: VACANCY RATES; PRIVATELY INITIATED RENTAL UNITS; (1)
SELECTED ONTARIO CMA'S, 1963-85. (PERCENTAGE)

Year (2)	Toronto	Hamilton	Kitchener	London	Ottawa	Sudbury
1963	4.40	- -	- -	- -	- -	- -
1964	2.80	- -	- -	- -	- -	- -
1965	1.60	1.40	- -	- -	- -	- -
1966	1.00	1.50	- -	- -	7.70	- -
1967	1.20	1.40	- -	- -	2.20	- -
1968	1.50	1.90	- -	- -	1.50	- -
1969	2.50	1.30	- -	4.00	1.50	- -
1970	2.75	2.20	5.40	4.90	1.90	0.30
1971	3.30	2.15	6.30	4.40	1.80	0.30
1972	2.50	2.15	3.30	5.95	1.95	5.20
1973	1.80	2.25	4.50	6.45	2.10	10.45
1974	1.05	1.85	5.05	4.35	3.40	6.90
1975	1.45	2.40	2.65	2.75	2.25	2.05
1976	1.10	3.10	3.00	2.30	2.05	1.15
1977	1.10	4.25	2.90	1.90	1.65	1.20
1978	0.85	3.85	2.70	2.15	1.45	5.35
1979	1.20	2.45	2.25	4.25	3.00	8.50
1980	0.75	1.45	1.65	5.00	3.85	2.65
1981	0.35	0.90	1.15	2.85	1.40	1.30
1982	0.55	0.60	0.95	2.75	0.30	1.10
1983	1.10	1.00	1.55	3.05	0.30	1.20
1984	0.70	0.70	0.65	1.70	0.30	0.85
1985	0.50	0.40	0.40	0.90	0.90	1.00
Averages: (3)						
Pre-control	2.20	1.81	4.91	5.01	2.73	4.63
Post-control	0.82	2.03	1.87	2.88	1.92	2.59
Total	1.57	1.94	2.93	3.67	2.32	3.23

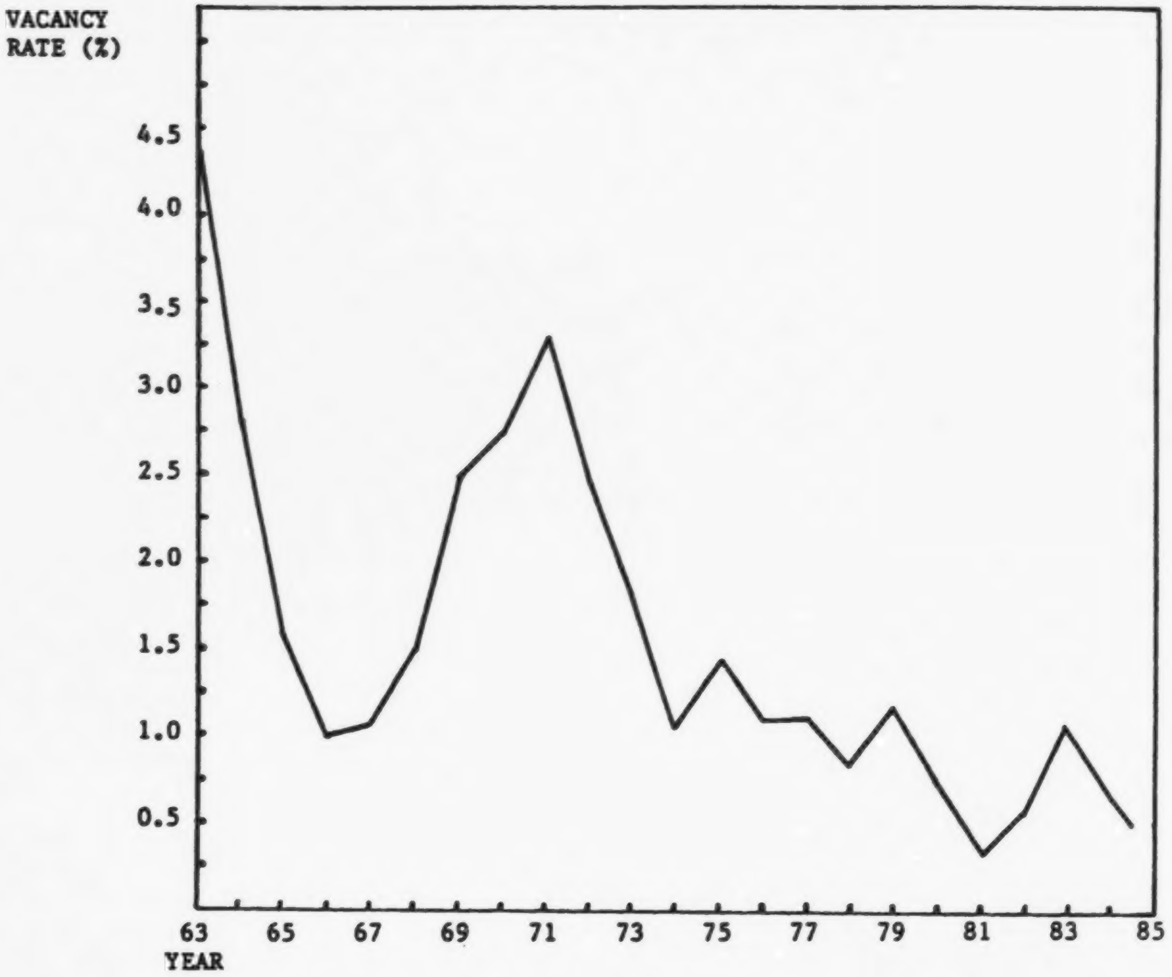
Notes: 1. In structures of 6 or more units, pre-control period is from beginning of data series to 1974.
2. Estimates are averages of the twice yearly surveys. 1985 figures are for April.
3. Pre-control period is from the begining of the data series to 1974. Post-control is from 1976 through 1984. Total includes 1975.

Source: Rental Market Vacancy Surveys, CMHC, various issues.

A second conclusion is that vacancy rates have been generally much lower since the imposition of rent review than before. With the exception of Hamilton, all CMA's experienced average vacancy rates above 2.0 in the pre-control period and noticably lower rates in the post-control period. Only 2 of the 47 vacancy rates reported for the period before 1975 were less than 1.0. In the period from 1976 to 1984, 17 of 54 observations were below 1.0. Most of the vacancy rates below 1.0 have occurred since 1980. Thus one's general impression is that despite short term variation, vacancy rates have been continually declining since the imposition of rent review (See Figure 2.1 for Toronto).

These aggregate vacancy data conceal a considerable discrepancy between vacancies in recently completed apartments (generally uncontrolled and high priced) and older buildings. As an extreme example, Pringle (1985, Table 2.21) indicates that the vacancy rate for older apartments in the Toronto CMA was 0.7 in October, 1983, while buildings less than 18 months old (but more than 6 months) experienced vacancy rates of 17.6. This suggests that availability problems have been concentrated in older, rent controlled buildings where rents are more suitable for lower income tenants.

FIGURE 2.1
VACANCY RATE (1)
TORONTO CMA, 1963-1985 (2)



NOTES: 1. For privately initiated apartment structures of six or more units, excluding those completed within 6 months of the survey.

2. 1963-1968 figures are for June.
1969-1974 are the averages of June and December.
1975-1984 are the averages of April and October.
1985 is for April only.

SOURCE: Rental Apartment Vacancy Survey, Toronto branch, Canada Mortgage and Housing Corporation, various issues.

A lack of available rental housing for lower income groups is also indicated by the City of Toronto Housing Department. According to its Annual Report (1982, p. 17), there were 4,198 households on the Cityhome waiting list for 1600 rent geared to income units and families were waiting three years for a two bedroom unit.

We conclude from this discussion that lack of available accommodation now poses a serious problem for most renters and particularly for those with modest incomes. This lack of availability probably restricts the mobility of the rental population and contributes to inappropriate utilization of the housing stock, although this has not been documented.

2. Affordability

The concept of affordability has been discussed extensively in material submitted to the Commission and elsewhere.[6] Only the briefest of summaries will be attempted here.

The idea of affordability is rooted in the widely held belief that all Canadians are entitled to adequate housing at prices they can afford.[7] This concept involves three related elements: the adequacy of the housing consumed, the

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6. See Stanbury and Vertinsky (1985, 6-101 ff.), Adams, Ing, and Pringle (1985, sec. 3), Pringle (1985, 119-144), Steele and Miron (1984), Marks (1984), Miron (1984) and Miron and Cullingworth (1983) among others.
7. "It is the fundamental right of every Canadian to have access to good housing at a price he can afford." (Hon. Ronald Basford, Minister responsible for Housing, 1973, as cited in Adams, Ing and Pringle, 1985, 122).

rent or ownership cost of the housing, and the income of the household.

The incidence of affordability problems in a population group is usually measured by the fraction of households which are paying more than a specified percentage of their gross income in rent. Table 2.14 shows the incidence of affordability problems in Ontario on alternative definitions of this critical threshold. These data, derived from the 1981 Census, seem to indicate a serious problem of affordability. In 1981, 38.6% of Ontario renter households paid more than 25% of their previous year's income in rent and 28.8% percent of the households had rent-to-income ratios in excess of 30%.

Most observers agree that these data have serious deficiencies as measures of the affordability of adequate rental housing. The main problems are that

i. rents may be excessively high because households are voluntarily consuming higher qualities or quantities of housing than the minimum considered "adequate",

ii. the rent actually paid may be lower than that necessary to purchase "adequate" housing if the household is economizing on housing expenditures in order to purchase other necessities,

iii. the income used as the denominator of the rent-to-income measure may not properly measure the household's ability to afford housing,

TABLE 2.14: RENT-TO-INCOME RATIOS; CANADA, ONTARIO AND THE CMA'S, 1981.

REGION	% OF HOUSEHOLDS OVER THE RENT-TO-INCOME THRESHOLDS(1) 20%	25%	30%	35%	40%	50%
CANADA	53.8	39.8	30.5	24.4	20.1	14.3
ONTARIO	55.1	38.6	28.8	22.7	18.6	13.4
HAMILTON	53.5	38.2	29.1	23.3	19.2	13.4
KITCHENER	53.7	37.4	27.6	21.9	18.1	12.9
LONDON	57.9	41.8	31.5	24.9	20.3	15.0
OSHAWA	53.7	38.5	28.4	22.9	18.9	14.0
OTTAWA	53.9	36.3	26.4	20.7	16.9	12.5
ST. CATHARINES(1)	56.5	42.3	33.3	27.3	22.9	16.3
SUDBURY	49.5	35.3	27.7	23.1	19.6	14.1
THUNDER BAY	56.2	38.9	29.9	24.0	20.1	14.2
TORONTO	56.8	38.9	28.3	21.8	17.8	12.8
WINDSOR	59.7	44.9	35.1	29.2	24.4	18.1
COEFF. OF VARIATION	0.05	0.07	0.09	0.10	0.11	0.12

NOTES: 1. EXCLUDES HOUSEHOLDS WITH NEGATIVE OR NO HOUSEHOLD INCOME.
BASED ON MID-1981 GROSS RENTS AND 1980 PRETAX INCOMES.
2. INCLUDES NIAGARA.

SOURCE: DERIVED FROM STATISTICS CANADA, 1981 CENSUS, 93-942.
AS FOUND IN PRINGLE, 1985.

iv. the threshold used to define the presence of an affordability problem should vary with household size and income.

v. the data used to measure rent and income may be out of phase, so that income is understated.

Correcting the data for these problems makes a significant difference in the indicated incidence of affordability problems. Steele and Miron (1984) correct the last two problems by adjusting reported income and by specifying a different threshold for each size of household. Different thresholds are required because smaller households need to spend less on other necessities such as food and clothing. Consequently they can achieve acceptable minimum standards of nutrition, clothing and shelter while spending a higher fraction of their income on rent. (Steele and Miron, 1984, 7-9). Steele and Miron also exclude all households with incomes in excess of twice the Statistics Canada low-income cut-off. Their results indicate that only 15.5% of Ontario rental households had an affordability problem in 1982. Affordability problems appear greatest among families with incomes below the low-income cutoff: over 60% of such families had affordability problems (see Tables 2.15 and 2.16).

TABLE 2.15: RENTER HOUSEHOLDS WITH AFFORDABILITY PROBLEMS(1)
ONTARIO, 1976-1982. (000'S OF HOUSEHOLDS)

	Urban Areas with 100,000 plus Population				Other Urban Areas,(2) Rural Areas			
	(1969-base poverty line)		(1978-base poverty line)		(1969-base poverty line)		(1978-base poverty line)	
	1976	1980	1980	1982	1976	1980	1980	1982
Family renters	76.7	60.7	60.7	46.6	23.4	19.4	19.4	25.9
Elderly renters	41.6	37.6	39.3	26.4	(7.9)	8.3	8.3	5.3
All renters	182.1	153.4	156.7	122.0	43.1	44.0	44.0	44.8
	All Areas							
All renters	225.2	197.4	200.7	166.8				
Incidence	25.0%	19.8%	20.1%	15.5%				

NOTES: 1. Weighted estimates for renters computed using 1976 Household Income, Income, Facilities and Equipment Micro Data file, 1975 Incomes; 1980 HIFE, 1979 Incomes; and 1982 HIFE, 1981 Incomes; Parentheses indicate that the estimate is based on twenty-five to forty-nine observations. An affordability problem is defined to exist if the criterion given in Table 2.17 is satisfied and if household income is less than twice the poverty line. Household income for 1982 is estimated as given in Table 2.17 and for other years is estimated analogously. The poverty line is taken as the Statistics Canada low-income cut-off; "1969-base" refers to the cust-off based on 1969 family expenditure data and "1978-base" to that based on 1969 family expenditure data.

Note that the cut-off is designed for use with family data although it is used here for households.

2. "Other urban areas" only for "Elderly renters".

SOURCE: From Miron and Steele, 1984, Table 3. See Note 1.

TABLE 2.16: RENTER HOUSEHOLDS WITH AFFORDABILITY PROBLEMS. ONTARIO, 1982. (1)

	SETTLEMENT SIZE					
	100,000 PLUS PEOPLE		OTHER URBAN AREAS		RURAL AREAS	
	Y<P[2]	P<Y<2P	Y<P	P<Y<2P	Y<P	P<Y<2P
All Renters						
Incidence	49.2%	11.2%	51.3%	9.7%	(58.3%)	3.8%
Number ('000)	91.7	30.4	31.4	7.9	4.9	0.5
Family Renters						
Incidence	61.2%	12.6%	66.7%	11.2%	[69.8%]	[6.0%]
Number ('000)	33.4	13.1	17.2	4.0	4.2	n.a.
Elderly Renters						
Incidence	32.8%	10.6%	13.4%	16.6%	n.a.	n.a.
Number ('000)	20.7	5.7	n.a.	n.a.	n.a.	n.a.

Notes: 1. Weighted estimates for renters have been computed using 1982 Household Income, Facilities and Equipment Micro Data file, 1981 Incomes. Parentheses indicate that the estimate is based on 25-49 observations; brackets indicate 10-24 observations; "n.a." indicates fewer than 10 observations or an estimate of fewer than 4,000 households. An affordability problem is taken to exist if the rent-to-income ratio is > 40% for a one-person household, > 30% for a two-person household, > 25% for a three-person household, >22.5% for a four-person household, and > 20% for a household with five or more people. A family is defined as any household with head under 65 and with at least one person less than 18. An elderly household is defined as a household with a head 65 or older.

2. Y refers to 1982 household income; it was estimated by projecting forward 1981 income given in the HIFE data base on the basis of the increase in average hourly earnings in manufacturing. P refers to the 1982 Statistics Canada low-income cut-off (1978 base); note that it is designed for use with family data although it is used here for households.

Source: Steele and Miron, 1984, p. 15.

Current income may be a poor measure of ability to afford rental accommodation because it neglects other sources of funds such as gifts, inheritances and liquidation of assets or borrowing (Miron, 1984, 3.1-3.5). It may also over or underestimate normal income if the current year is unusual in some respect. For example, the head of the household may be fully employed all year whereas he or she normally experiences some unemployment, or vice versa. Finally, for some groups such as students and young professionals, current income may not reflect reasonable expectations of future income. These problems are frequently exacerbated by matching the present year's rent with the previous year's income. This introduces non-comparabilities due to inflation and change in household status. Miron (1984, ch.6) has investigated the effect of many of these deficiencies using data from the Canadian family expenditure survey, 1978. His results are reported as Table 2.17. They indicate that when all sources of funds are taken into account the incidence of affordability problems is reduced, particularly among very low-income groups. When actual income is replaced by that expected for the household's measureable characteristics, such as age and education, the incidence of affordability problems rises slightly, but falls noticeably among low-income groups. Finally, when rents are related to Miron's estimate of permanent income (which reflects the present value of expected future earnings), affordability problems rise noticeably in upper income groups but fall in lower income groups. The author notes that some of the peculiar behaviour of the rent to permanent income measure may be due to the manner in which permanent income is computed (p. 3.15).

CMHC (1983, 39) uses the concept of "core housing need" in an attempt to avoid the first two problems listed above. This measure attempts to identify households unable to afford adequate, uncrowded housing without paying more than 30% of their gross income.

Table 2.18 shows that a significantly lower fraction (17.8% in 1980) of Ontario's renter population is in core housing need than would be indicated by the 30% rent to income ratio (22.2%). It also indicates that Ontario's core housing needs are only slightly lower than Canada's as a whole. Table 2.19 shows the demographic characteristics of Canadian rental households in core housing need. It shows that core housing needs are very significantly associated with poverty. Roughly 60% of all renter households in the lowest income quintile are in core housing need, and 93% of the rental households in core housing need fall into the lowest quintile of the income distribution.

TABLE 2.17: RENTER HOUSEHOLDS; VARIOUS ESTIMATES OF AFFORDABILITY PROBLEMS; CANADA, 1978.

Shelter Cost As Percentage (%)	.... Total Unit Income (Y)						All Income Groups (%)
	$0- 4,999 (%)	$5- 9,999 (%)	$10- 14,999 (%)	$15- 19,999 (%)	$20- 24,999 (%)	$25,000 or more (%)	
				(a) TSE/Y			
20% or more	88.5	84.0	49.3	19.0	9.7	6.1	44.7
25% or more	74.3	66.3	20.9	6.4	3.4	1.3	29.2
30% or more	65.1	48.1	6.2	3.1	2.2	0.8	20.2
35% or more	59.6	29.6	2.3	0.5	1.3	0.5	14.0
40% or more	51.7	17.1	0.8	0.3	0.0	0.4	9.8
				(b) TSE/(Y+OMR-NCAD)			
20% or more	85.7	77.1	43.5	22.0	12.0	9.5	43.0
25% or more	70.3	56.7	18.0	7.3	4.5	3.5	26.7
30% or more	61.0	35.4	6.0	3.2	1.7	1.5	17.0
35% or more	44.8	21.8	1.5	0.9	0.9	0.5	10.5
40% or more	31.3	13.0	1.0	0.3	0.0	0.0	6.6
				(c) TSE/YPHE			
20% or more	71.2	67.9	52.3	44.4	49.1	56.8	56.4
25% or more	62.7	55.3	36.1	30.0	33.3	41.5	42.4
30% or more	56.3	47.2	25.2	18.7	22.3	31.5	32.7
35% or more	48.2	40.8	18.6	15.5	14.4	24.9	26.5
40% or more	42.7	34.3	13.9	10.7	9.4	18.2	21.0
				(d) TSE/YCEH			
20% or more	74.2	72.3	43.4	28.2	22.8	29.4	45.8
25% or more	60.8	52.9	25.8	14.6	10.5	18.3	30.6
30% or more	49.9	39.7	16.9	8.0	6.6	9.8	21.7
35% or more	41.2	28.3	10.0	5.0	3.6	5.8	15.2
40% or more	34.2	22.1	6.1	3.3	3.2	2.7	11.4

Note: TSE is total shelter expense, Y is total unit income, Y+OMR-NCAD is source of funds, YPHE is permanent income, and YCEH is current expected income.

Source: Statistics Canada, Survey of Family Expenditures in 1978 microdata tape. Calculations by J.R. Miron based on Renter Subfile.

As found in Miron, 1984, Table 3.5.1

TABLE 2.18: AFFORDABILITY PROBLEMS AND CORE HOUSING NEEDS FOR RENTER HOUSEHOLDS; CANADA, 1980.

REGION	AFFORDABILITY PROBLEMS (1) NUMBER	AFFORDABILITY PROBLEMS (1) INCIDENCE (%)	CORE HOUSING NEED (2) NUMBER	CORE HOUSING NEED (2) INCIDENCE (%)
CANADA	614,467	21.6	521,643	18.3
ATLANTIC	36,043	22.8	36,341	23.0
QUEBEC	150,381	16.3	136,918	14.8
ONTARIO	225,101	22.2	179,688	17.8
PRAIRIES	120,071	27.1	100,188	22.6
BRITISH COLUMBIA	82,871	26.5	68,508	21.9

NOTES: 1. Households paying more than 30 per cent of their gross income for rent (rent includes an allowance for heat).
2. Households unable to afford adequate , uncrowded housing without paying more than 30 per cent of gross income.
3. Adjustments have been made for excluded cases. See source.

SOURCE: HIFE 1980 Micro Data File and Projections by CMHC. As found in CMHC, 1983, Table 3.3.

TABLE 2.19: CORE HOUSING NEED(1) FOR RENTER HOUSEHOLDS(2) CANADA, 1980.

Household Characteristics	Households in Core Need No.	Households in Core Need %	Distribution of Rental Population (%)	Incidence of Need (%)
Age of Household Head				
24 and under	101,000	20.8	18.2	20.9
25-34	99,000	20.5	30.7	12.2
35-44	50,000	10.2	13.8	13.6
45-54	50,000	10.3	11.1	16.9
55-64	52,000	10.8	10.2	19.5
64-69	40,000	8.3	5.3	38.8
70 and over	92,000	19.0	10.6	32.9
Family Type(3)				
Individual(s) - male head	91,000	18.7	17.4	19.7
Individual(s) - female head	191,000	39.4	23.6	30.6
Family, no children	47,000	9.7	20.3	8.8
Family, with children	56,000	11.6	24.8	8.5
Single-parent - male	5,000	1.1	1.1	17.7
Single-parent - female	84,000	17.4	9.0	35.2
Other	10,000	2.1	3.7	10.3
Income Quintile				
First Quintile	452,000	93.4	28.7	59.7
Second Quintile	32,000	6.6	27.3	4.4
Third Quintile	*	0	20.6	0
Fourth Quintile	0	0	14.1	0
Fifth Quintile	0	0	9.3	0

NOTES:
1. Households unable to afford adequate, uncrowded housing without paying more than 30% of gross income.
2. Data unadjusted for excluded households. When adjusted for excluded households, the total number of renter households experiencing core housing need is estimated to be 521,643.
3. Family type is determined by the characteristics of the primary economic family in the household.

* The sample size is considered to be too small to provide a reliable estimate.

SOURCE: HIFE 1980 Micro Data File and Projections by CMHC.
As found in CMHC, 1983, Table 3.4.

The decline in the incidence of affordability problems when various refinements to the traditional rent-to-income ratio are considered should not be interpreted as denying that affordability is a major problem for many families. CMHC (1984, 42) rightly argues instead that more refined measures should be used as a guide to the identification of those groups whose affordability problems are most severe. On the basis of Table 2.19, CMHC identifies these groups as "senior citizens, individual female households, female single parent households and households in the lowest income quintile" (p. 42). Although this conclusion is based on data for all of Canada, there is no reason to suppose that the demographic characteristics of Ontario renters deviate greatly from the national average. Using Ontario data, Miron and Cullingworth (1983, 131) similarly claim that affordability problems arise mainly among "elderly households, lone parent households, households without income earners and persons living alone".

Both CMHC and Miron and Cullingworth appear to be selecting groups with a high incidence of affordability problems. This can be misleading for at least two reasons.

First, a group with a low incidence of affordability problems may nevertheless contain a large fraction of all problem households, simply because the group itself is large. Thus families with both spouses present account for 21% of problem households in Table 2.19 despite the low incidence of affordability problems for this group. Tables 2.19, 2.20 and 2.21 can be used to compare the distribution of problem households as estimated by CMHC and by Miron and Cullingworth. Both studies indicate that single person households account for one-half or more of affordability problems, while single parent families, which have a high incidence of affordability problems, account for fewer than one-fifth of the problem households. The CMHC data suggest that the number of two-parent families with affordability problems is not far short of the number of single-parent problem families.

Secondly, in view of the clear evidence that acceptable rent-to-income ratios are higher for individuals than for larger households, CMHC's interpretation of the groups with greatest affordability needs may be slightly biased. Table 2.19 probably underestimates the number of families with children in core need and overestimates the number of single person households in need. To the extent that two parent families are larger than single parent families, their affordability problems have also been underestimated.

TABLE 2.20: AFFORDABILITY PROBLEMS(1) AMONG UNSUBSIDIZED RENTER HOUSEHOLDS(2) ONTARIO, 1978.

Household Type	Number of Problem Households	Percentage Distribution	Incidence of Problems
Head Under 65:			
One Parent	32,000	13.2	- -
Living Alone	83,000	34.3	- -
Other	72,000	29.8	- -
Total	187,000	77.3	26.3
Head 65 or over:			
Living Alone	36,000	14.9	- -
Other	18,400	7.6	- -
Total	54,400	22.5	59.1
All Age Groups	242,000	100.0	30.2

Notes: 1. Affordability estimates are based on the 25% rent-to-income threshhold; using 1977 total household income and mid-1978 rents.
2. Unsubsidized households exclude those receiving assistance from relatives or the government. See Miron and Cullingworth 1983, p. 133.

Source: Derived from Statistics Canada, HIFE microdata files by Miron and Cullingworth, 1983.

TABLE 2.21: ALTERNATE MEASURES OF AFFORDABILITY PROBLEMS; UNSUBSIDIZED RENTER HOUSEHOLDS (1); ONTARIO, 1972-78.

AFFORDABILITY MEASURE	1972	1974	1976	1978
Problem Households (thousands)(2)	238.0	273.0	297.0	242.0
Incidence of Problem Households (%)	31.3	33.2	32.8	30.2
Total Gap ($ millions)(3)	147.4	206.2	274.2	275.7
Average Gap per URH ($)(1)	194.0	251.0	303.0	344.0
Average Gap per Problem Household ($)	619.0	754.0	924.0	1,139.0
Gap-to-income per URH (%)	2.2	2.5	2.5	2.2
Gap-to-income per Problem Household (%)	15.2	17.4	16.9	17.1

NOTES: 1. Unsubsidized renter households (URH) exclude those receiving rent assistance from the government or relatives.
2. Based on 25% rent-to-income threshold.
3. Rent gap is the amount spent on rent in excess of 25% of income.

SOURCE: Computed from unpublished tabulations of the 1978 HIFE data file, Statistics Canada. As found in Miron and Cullingworth, 1983, Table 7.10.

On the basis of this discussion, we may conclude that affordability is a serious problem for between 150,000 and 200,000 Ontario renter households. These households are overwhelmingly concentrated in the lowest 20% of the income distribution. Most of the problem households are likely to be families with children (with one or two parents present) or households with elderly heads. It is important to note that the incidence of affordability problems is far less than 50% in all demographic categories (except the lowest income quintile). Thus any program directed at a specific demographic category without an income test is likely to provide less than half its benefits to those who truly need them.

Information on the geographic distribution of problem households is limited. Table 2.16 shows that, contrary to some expectations, affordability problems are not concentrated in the largest CMA's. The incidence of rent-to-income ratios above 30% is less than the provincial average in Toronto and Ottawa and is highest in St. Catherines-Niagara and Windsor. Table 2.16 shows no clear difference between large and small urban centres, except in the case of poor elderly renters, for whom the incidence of affordability problems is much greater in the large cities.

In summary, Census rent-to-income ratios suggest a serious problem of affordability. We must bear in mind, however, that Census estimates are seriously deficient for a number of reasons. Corrections for these difficulties, culminating in the concept of "core need", leads to reduced estimates of the incidence of affordability and a better ability to pinpoint groups especially in need.

Between 150,000 and 200,000 Ontario renter households are estimated to be in core need. Core housing needs are overwhelmingly concentrated in the lowest quintile of the income distribution. Within that income group, families with children (with one or both parents present) and elderly households have the highest incidence of need. Additional affordability problems arise among low-income single people who, as boarders, lodgers, or hostel residents, are not counted as rental households. Affordability problems are not concentrated in the largest CMA's and affordability problems appear to have declined substantially since 1974, but may have begun to rise recently.

3. Rent Gouging

Most commentators seem agreed that the primary justification for introducing rent review in 1975 was to control rent gouging. The precise meaning of the term has never been established. Stanbury (1984, v.1, 2-6) identifies five concepts of rent gouging, namely:

i. setting rents above the market rent for comparable units,

ii. raising rents beyond any increase in out-of-pocket costs,

iii. the repudiation of widely held expectations of falling real rents,

iv. raising rents to the market clearing level when they had previously fallen below it, and

v. an extraordinary rapid adjustment in rent levels.

A close reading of the public discussion leading up to controls, as documented in Stanbury and Thain (1984), makes it clear that a rapid increase in nominal rents is the central element of rent gouging as popularly conceived. Stephen Lewis's campaign speeches on the issue consistently referred to high percentage rates of change in rents.[8] Two ideas closely associated with rent gouging are affordability and windfall profits to landlords. Thus many of the cases of rent gouging reported in the Toronto Star (see Stanbury and Thain, 7-10) concerned the "poor, elderly and disadvantaged". Similarly, while there seems to have been recognition that increased operating costs should lead to increased rents[9], increases in rent due to demand pressure or to refinancing were classified as gouging.[10] Because the concept of rent gouging is so broad, it is difficult to find data which capture it. For the purposes of this discussion, we will equate rent gouging with rapid percentage increases in rent and consider affordability and windfall profits later. It should be recognized, however, that this separation is only for analytical purposes and that concepts of rapid rent increase, affordability and equity are all bound up in the popular idea of rent-gouging.

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[8] For example, Lewis cited "11 cases of rent increases of 34% to 67% in Metro Toronto, including a case of an 85 year old woman ...who would have to spend 93% of her income to cover a rent increase." (Stanbury and Thain, 1984, 7-15)

[9] Stephen Lewis recognized that landlords with exceptionally high expenses should be allowed increases above his suggested 12% guideline and that "they do have a right to a fair return on their investment" (Stanbury and Thain, 1984, 7-26).

[10] See the examples quoted by Stanbury and Thain (1984, 7-16)

Even on this restricted definition, it is difficult to determine how important rent gouging has been in the past, since data on rents are largely inadequate. A major difficulty is that rent gouging is essentially a phenomenon of rapid increases in rents paid on specific units while data are available only for the increases in the average level of rents. Individual cases of rent gouging may easily occur even when the increase in average rents is low.

Data on the rate of increase in average rents may provide information about the frequency of individual cases of rent gouging if the latter is more frequent in times of the former. In general, this is not an unreasonable supposition, but the exact nature of rent regulation may alter the relationship. As discussed earlier, Table 2.9 indicated there have been three periods of rapid increase in rental component of the CPI since 1961. These occurred in 1966-68, 1974-76, and 1981-83. In each case, the episode of rapid rent increases followed several years in which rents increased much less rapidly than the general price level. Similarly, the CMHC rent data indicated very rapid rates of rent increase in 1974 and early 1975 as well as another period of rapid increase in 1981-82. It is important to notice that the present system of rent review has not prevented episodes of rapid increases in nominal rents.

Rapid changes in rents have also been associated with low vacancy rates.[11] The remarkably low vacancy rates now prevalent in the major Ontario rental markets might suggest that rent increases will be particularly rapid in 1986, but low rates of inflation experienced in 1984 and 1985 should mitigate this tendency.

To summarize, the central element in rent gouging is a rapid increase in nominal rents. The concepts of affordability and equity are closely associated with rent gouging in popular discussion, but are best treated separately for analytical purposes. Although the dating of rent gouging episodes differs with the measure of rent being used, it is clear that, since 1961, rents have risen rapidly in three episodes centred around 1966-68, 1974-76 and 1981-83. These episodes typically follow unanticipated bursts of inflation. Rent Review does not prevent rapid increases in average rent levels, but it may prevent the most extreme cases.

Although not an immediate problem, rent gouging (defined as a rapid increase in rents) has clearly occurred at several times in the past. An ideal housing policy would seek to minimize the difficulties which would be caused by recurrences of such episodes in the future.

4. Security of Tenure

Although a central element in many discussions of rent review and rental housing policy[12], the term "security of tenure" is not unequivocally defined. For the purposes of this report security of tenure will be considered a relative concept: tenure is more secure the fewer are the circumstances under which it must unwillingly be surrendered. The right to assign one's tenure to another is a further aspect of security of tenure.

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[11] See Smith (1974) and Rosen and Smith (1983) for evidence and discussion.

[12] This study accepts most of the points made by Makuch

Security of tenure can be considered to be an objective of housing policy or a means to ensuring a different objective, such as affordability, under rent controls. In the latter case, security of tenure may be required to protect tenants who are paying below market rents from discriminatory or punitive eviction. Makuch and Weinrib go further to consider the case of security from eviction even when tenants are unable to pay the rent, but Stanbury (1984, vol. 1, 3-4) notes that no legislation in Ontario addresses such circumstances. Lack of security of tenure occasioned by an inability to pay rising rents is best considered an aspect of affordability.

Makuch and Weinrib suggest that the goal of security of tenure, treated as an objective, should be to make tenants as psychologically secure as home owners. This would include the right to continued occupancy so long as the rent was paid, protection against discriminatory rent increases designed to force an end to the tenancy, and possibly the right to assign one's tenancy to one's immediate family in

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and Weinrib (1985) and Stanbury (1984, v.1, ch.3) in their extensive discussions of security of tenure. Only the central elements of their analysis are repeated here. Some slight differences and interpretation will be evident.

the case of death (p. 21). They reject the need to provide a general right to assign tenancies to third parties, but suggest that there may be a need to allow tenants to apply for the termination of the lease of another tenant whose conduct is irresponsible (p. 24).

These suggestions would place tenants in a situtation perhaps even preferable to that of homeowners, for without risking any capital they would have achieved the same security as an owner, with neither the maintenance obligations of an owner nor the immobility associated with high transactions costs of selling. Be that as it may, the provisions of the Landlord and Tenant Act, as outlined by Stanbury (1984), appear fully sufficient to protect tenants from all forms of discrimination by landlords.

In fact, the major problem with the current degree of security of tenure probably lies in the difficulty of evicting tenants who fail to act responsibly. An example is provided by the testimony of Mrs. Figa before the Inquiry, (2 June 1985). This proprietor of two rental dwellings described how the tenant of one house ripped down walls without permission, painted over dirt and caused her 5 months loss of rental while repairing the damage. In the case of the other house, a tenant in default of rental payments obtained free legal advice while she (the landlord) had to pay a lawyer to obtain what she considered her due. She concluded her testimony by asserting that she could easily accept the provisions of the Residential Tenancy Act if she were relieved of the difficulties caused by the security of tenure provisions of the Landlord and Tenant Act. Such difficulties faced by small landlords make them hesitant to acquire dwellings for rent or to convert existing houses for rental purposes. This reduces the supply of rental units and contributes to inefficient use of the housing stock.

Unfortunately, it does not seem possible to find a quantitative indicator of the degree of security of tenure enjoyed by tenants. Analytical considerations suggest that tenants will be most secure when rental housing is readily available. On this basis, security of tenure would be a significant problem in most Ontario cities were it not for the provisions of the Landlord and Tenant Act.

5. Social Diversity

The goal of maintaining social diversity in the core area of large Metropolitan areas was identified as an objective of rent regulation during Professor Stanbury's appearance before the Inquiry.[13] By social diversity is meant the residence of many ethnic groups and family types from all income levels in reasonably close proximity. This is an avowed goal of many social planners (e.g. the City of Toronto's Housing Department, 1982). It may be rationalized on both efficiency and equity grounds. As to the first, taxpayers in general may be willing to incur some expense to maintain social diversity either because they place a positive value on a vibrant and cosmopolitan downtown core or because they believe the presence of a socially diverse resident population increases safety and reduces the possiblity of urban blight. On equity grounds, voters may feel it unfair to force all low-income groups into ghetto like areas, possibly because such segregation reduces equality of opportunity in education, health and safety.

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[13] Stanbury and Vertinsky (1985, 7-8 to 7-9).

Social diversity is difficult to measure, but one indicator is the distribution of income within neighbourhoods. Social diversity and integration are indicated by a broad income distribution with a single peak (compare City of Toronto Housing Dept, 1982, 41). The City of Toronto has indicated some concern that tenants with moderate incomes are being excluded from municipal non-profit housing due to rising "lower-end-of-the-market" rents (pp. 43-45).

Data from the City of Toronto (see Table 2.22) indicate that it has a larger concentration of low-income groups than any other Metro municipality. 51.8% and 52.1% of all households in the City fell into the bottom two quintles of the income distribution (for the Toronto CMA) in 1970 and 1980 respectively. Since small households are probably overrepresented in the City, these data overstate the prevalence of poverty among City residents. Unfortunately, these data do not allow us to tell whether there is a severe problem of income segregation among city neighbourhoods. Some evidence on this is provided by Figure 2.2. These maps show Census Tracts within Metropolitan Toronto that fall within various quartiles of the income distribution. In 1980 five Census

Tracts had average household incomes less than $14,000 (the boundary of the lowest quartile of the Income Distribution) while a number of tracts exhibit average household incomes above $37,000. Clearly, some Toronto neighbourhoods are segregated by income. However, the majority of downtown tracts exhibited moderate average incomes, indicating reasonable success in maintaining social diversity at the neighbourhood level.

Toronto may have been more successful in maintaining social diversity than other Ontario cities. Figures 2.3 and 2.4 map the incidence of low-income economic families in Toronto and Hamilton. While both cities have clearly defined low-income regions, Hamilton's are concentrated in one large block in the north end while Toronto's are more scattered. This impression of a higher degree of income segregation in Hamilton is confirmed by the fact that 10% (15 of 146) of Hamilton's Census tracts had an incidence of low-income families in excess of 25% while only 5% of Toronto's 608 Census Tracts had a similarly high incidence of poverty.

In sum, while social integration by income distribution is by no means complete, substantial diversity exists in downtown Toronto. Social diversity appears to have been well maintained over the intercensal period, 1971-81.

TABLE 2.22A: HOUSEHOLD DISTRIBUTION BY INCOME QUARTILES; TORONTO, 1970-80. (PERCENTAGE)

	HOUSEHOLDS BY QUARTILES (PERCENTAGE)							
	Quartile 1		Quartile 2		Quartile 3		Quartile 4	
REGION	1970	1980	1970	1980	1970	1980	1970	1980
ETOBICOKE	18.6	21.2	24.0	24.5	26.9	25.7	30.5	28.5
NORTH YORK	20.2	24.0	24.1	26.0	25.5	24.4	30.1	25.6
TORONTO	36.7	34.1	24.2	28.0	18.0	18.8	21.1	19.0
YORK	32.1	33.5	29.0	30.5	21.9	21.7	17.0	14.3
SCARBOROUGH	19.8	22.5	24.3	24.0	29.8	28.0	26.1	25.5
EAST YORK	29.1	28.1	26.4	31.1	23.9	24.2	20.5	16.6
METRO	27.2	27.3	24.7	26.6	23.3	23.3	24.8	22.7

SOURCE: Canadian Census,as found in CITY OF TORONTO, RESEARCH REPORT 24, P. 7.

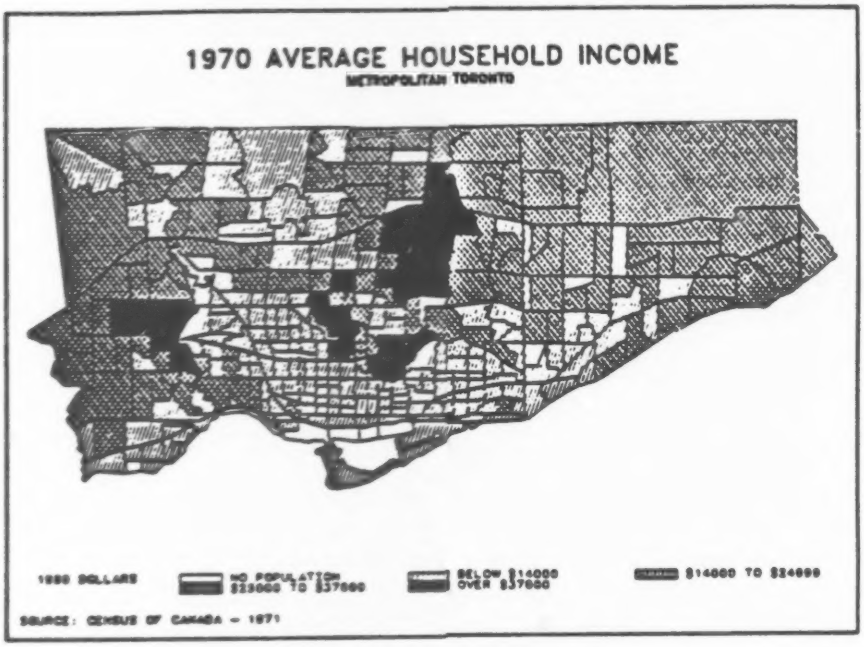
TABLE 2.22B: HOUSEHOLD DISTRIBUTION BY INCOME QUINTILES; TORONTO, 1970-80. (PERCENTAGE)

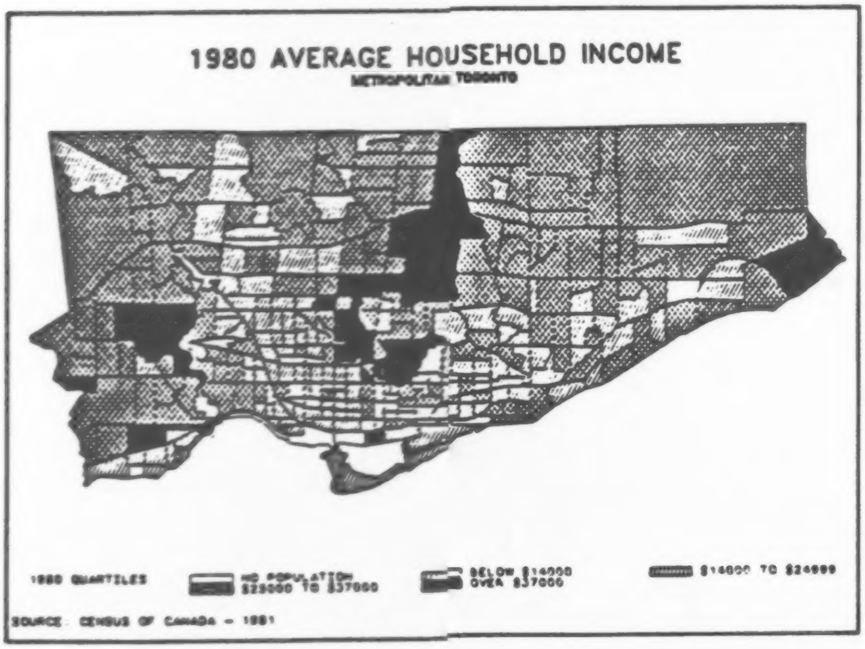
	HOUSEHOLDS BY QUINTILES (PERCENTAGE)									
	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5	
REGION	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980
ETOBICOKE	14.3	17.0	17.5	18.8	21.0	19.5	22.4	21.9	24.9	22.9
NORTH YORK	15.4	19.5	18.1	19.9	20.5	19.8	21.2	19.9	24.7	20.9
TORONTO	29.8	28.3	22.0	23.8	16.4	17.5	14.2	14.7	17.6	15.7
YORK	25.0	27.6	25.0	24.1	20.3	21.7	16.6	15.8	13.1	11.0
SCARBOROUGH	15.5	18.5	17.2	17.2	22.8	20.7	24.3	23.9	20.2	19.7
EAST YORK	22.7	22.1	21.7	25.5	20.8	21.6	19.0	17.8	15.9	12.7
METRO	21.6	22.4	20.0	21.0	19.4	19.4	18.8	18.9	20.1	18.2

SOURCE: Canadian Census,as found in CITY OF TORONTO, RESEARCH REPORT 24, P. 7.

FIGURE 2.2

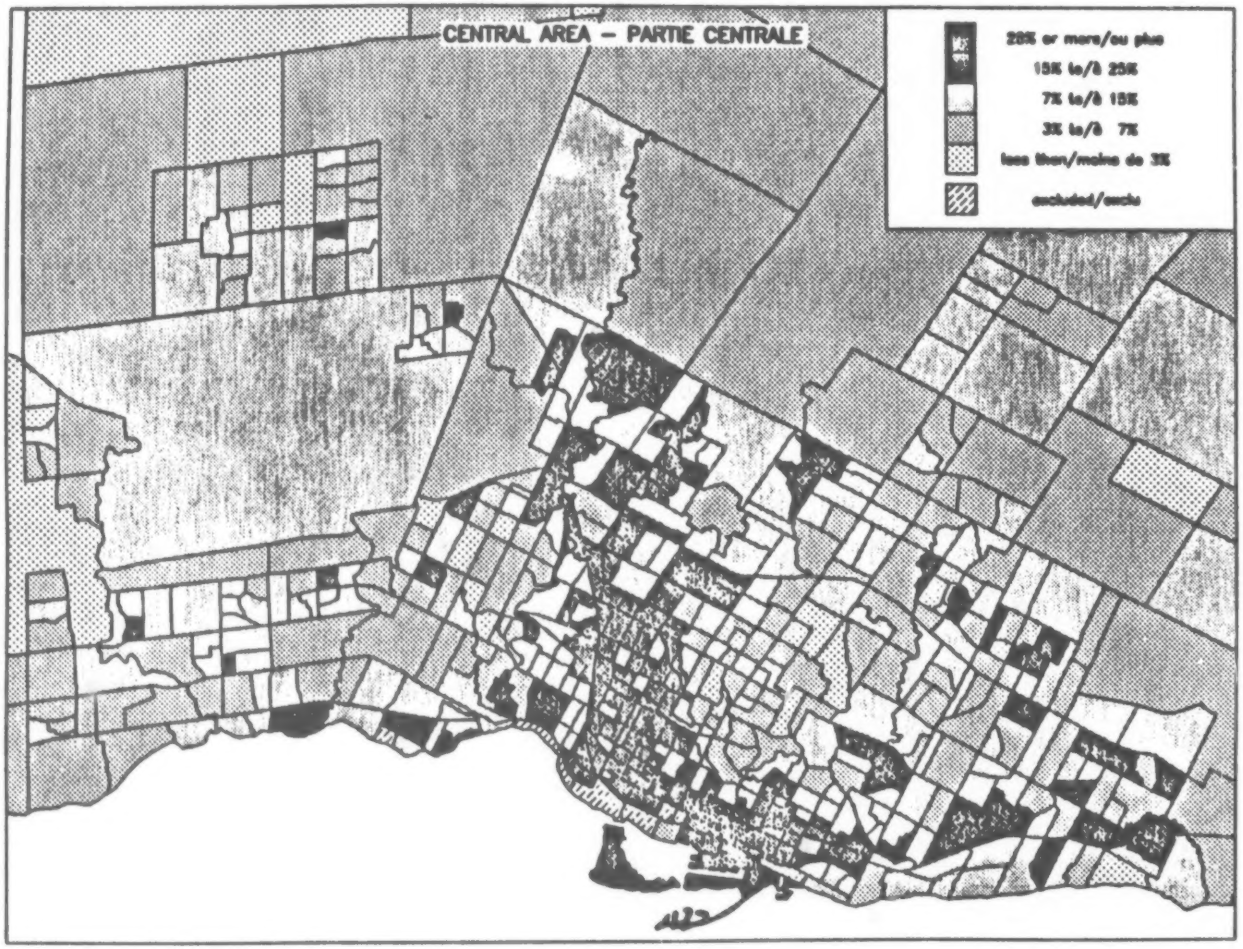
HOUSEHOLD INCOME MAPS
TORONTO, 1970, 1980


1970 AVERAGE HOUSEHOLD INCOME
METROPOLITAN TORONTO
1980 DOLLARS
NO POPULATION
$23000 TO $37000
BELOW $14000
OVER $37000
$14000 TO $24999
SOURCE: CENSUS OF CANADA - 1971


1980 AVERAGE HOUSEHOLD INCOME
METROPOLITAN TORONTO
1980 QUARTILES
NO POPULATION
$23000 TO $37000
BELOW $14000
OVER $37000
$14000 TO $24999
SOURCE: CENSUS OF CANADA - 1981

SOURCE: AS FOUND IN CITY OF TORONTO, RESEARCH REPORT #24, MAPS 4 AND 5

FIGURE 2.3
INCIDENCE OF LOW-INCOME FAMILIES
TORONTO, 1981


CENTRAL AREA – PARTIE CENTRALE
25% or more/ou plus
15% to/à 25%
7% to/à 15%
3% to/à 7%
less than/moins de 3%
excluded/exclu

SOURCE: STATISTICS CANADA, 1981 CENSUS, CAT. NO. 99.919

FIGURE 2.4

INCIDENCE OF LOW INCOME, 1980, ECONOMIC FAMILIES

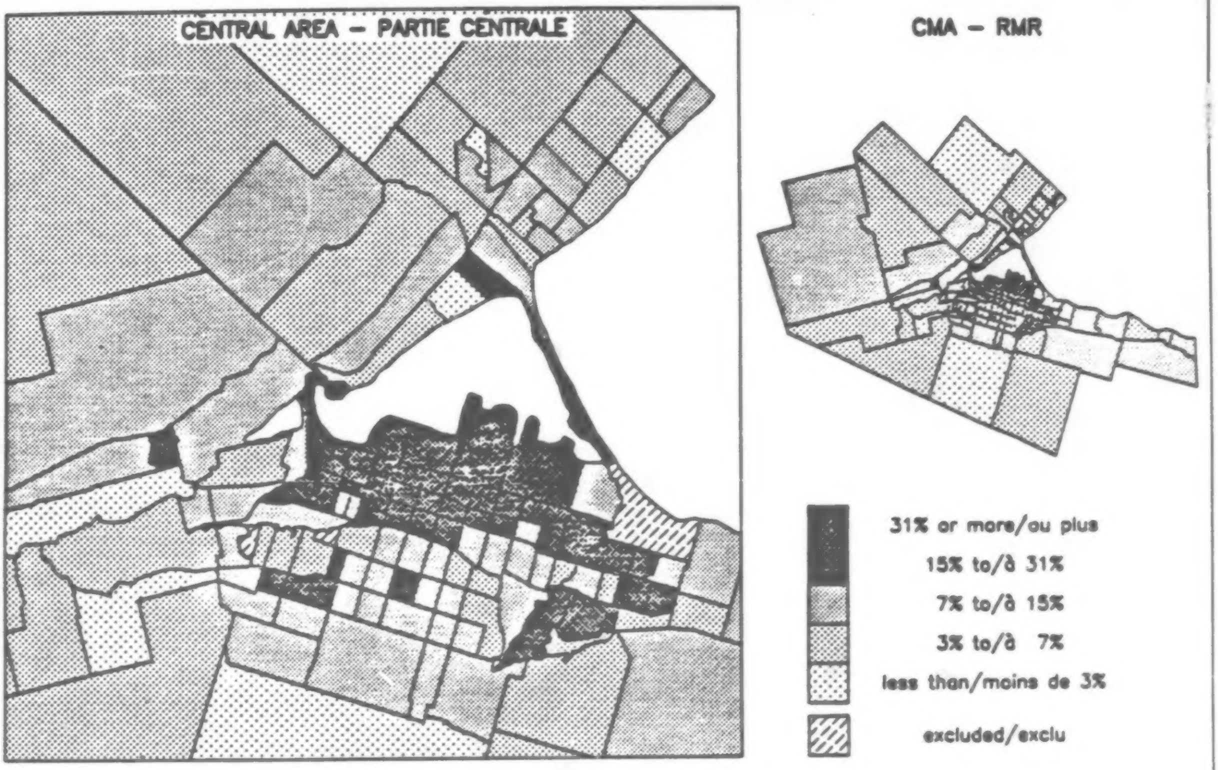
Incidence of low income is the percentage of economic families in the CT that fall below the low income cut-offs. Data for CTs with a total population of less than 250 persons are excluded. See the introductory text for the universe covered and definitions.

TAUX DES FAIBLES REVENUS, 1980, FAMILLES ÉCONOMIQUES

Le taux des faibles revenus correspond au pourcentage de familles économiques dont le revenu est inférieur au seuil de faible revenu. Les données relatives aux SR dont la population totale est inférieure à 250 habitants sont exclues. La description de l'univers et les définitions figurent dans l'introduction.

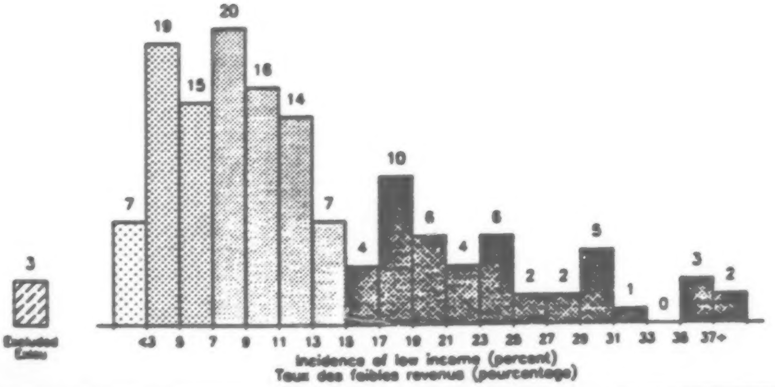
HAMILTON

CENSUS TRACTS – SECTEURS DE RECENSEMENT



NUMBER OF TRACTS BY INCIDENCE OF LOW INCOME, 1980
NOMBRE DE SECTEURS SELON LE TAUX DES FAIBLES REVENUS, 1980

146 tracts/secteurs



COMPARATIVE FIGURES
CHIFFRES COMPARATIFS

HAMILTON (CMA – RMR)	12.3%
ONTARIO	11.4%
CANADA	13.0%

SOURCE: 1981 CENSUS OF CANADA
PRODUCED BY STATISTICS CANADA

SOURCE: RECENSEMENT DU CANADA DE 1981
ÉTABLIE PAR STATISTIQUE CANADA

6. Equity

It is easy to agree that ideal rental housing policies should be equitable, but considerably harder to define what is meant by equitable. The issue is discussed but not resolved by Stanbury (1984, v2, ch. 3). The problem is that two substantially different ideas of justice or equity are being confounded in popular discussion. One of these ideas, which we shall term the _market_ concept of justice,[14] lies behind the arguments of Nozick and von Hayek cited by Stanbury (v. 2, 3-28 to 3-31) and dates back to Hobbes (1651). It is the only concept of justice fully consistent with a market economy. The second, which we shall term the _non-market_ concept of justice, dates back even further to classical civilization and the rise of the great world religions. It is not fully consistent with a market society. (MacPherson, 1962, 63).

The market concept of justice, as developed by Hobbes (ch. 13-15), starts from the proposition that, in the absence of a central authority, every person has the unfettered freedom ("right") to appropriate any thing he has the power to seize and hold. The only way to avoid the misery consequent upon such a war of all against all is to enter into mutually beneficial agreements or contracts. Such contracts are unenforceable without a central coercive power, so it is rational for all to delegate some of their rights to a sovereign power which will govern them.

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[14] Compare MacPherson (1962, 64) "Where all values are reduced to market values, justice itself is reduced to a market concept".

All contracts are undertaken in the expectation of gain by both parties and it would be absurd to frustrate the mechanism by which such gain occurs. Accordingly it is a natural law that all should fulfill their contracts to the full extent of their abilities. Not to fulfil a contract is the essence of injustice, for by not fulfilling a contract one is renouncing the only mechanism which avoids civil war and misery.

Still according to this view, people are entitled only to that which they have merited through performance of their part in a contract. Moreover, equity consists entirely in impartially rendering to each individual his due without favouring any person or class of persons.

When applied to rental housing, the market view of justice is chiefly offended by the violation of contract implied by rent control. Landlords have implicitly contracted with other members of society to build and maintain rental accommodation in return for the right to lease it at market rents. They would not have undertaken to construct or maintain the rental accommodation otherwise. Having fulfilled their side of the bargain, they now find the rules changed and they are denied what is owed to them. This is unjust and inequitable. Moreover, it is absurd for society to vitiate such contracts, because in doing so it teaches landlords not to enter into such agreements in the future and consequently society is denied the rental accommodation it might otherwise have had.

This market view of justice and equity is fully consistent with economic efficiency, but it represents a significant departure from older ideas of justice which, apparently, are still at the root of much popular opinion. In this older non-market view, the essence of injustice is still the violation of law, but the laws are deduced either from what is necessary that "wisdom, courage and temperance [may] take their place in the commonwealth"[15] or from the common ethical teachings of mankind.[16]

By the 17th century Hobbes (ch.15) could characterize the older view of justice as consisting of two parts: commutative justice required that commodities or services exchanged be of equal value while distributive justice required that equal benefit accrue to those of equal merit.

From the concept of commutative justice is derived the idea of a fair or just price. A fair price is one that is equal in value to the goods received. Most people appear to believe that a fair price is one which covers the cost of production of a commodity and provides the producer with an adequate but not excessive reward for the use of his time, expertise and capital.

Windfall profits appear to violate the concept of a fair price. For example, when rents rise due to increased demand for housing, people pay more for a constant quality of housing. If the previous rent was fair, then the new higher rent must be unfair and unjust, because it violates the principle of commutative justice.[17]

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15. Plato, The Republic, (Cornford, tr., 1945, 127).
16. Lewis, The Abolition of Man.
17. Of course the advocate of market justice will observe

From the concept of distributive justice is derived the notion of horizontal equity. People in comparable situations should be treated equally, because they are of equal merit. A simple extension leads to the idea that those who are better able to pay for public services should pay more: there should be equality of sacrifice amongst contributors to the public good. This is normally taken to imply that the burden on tax changes or regulatory changes should fall more heavily on the relatively rich. Thus most economists hold that vertical equity requires progressive taxes. Finally, if we accept that all men are brothers (and all women sisters!) and therefore equally meritorious of the fruits of society's labours, distributive justice seems to imply a vigorous attempt to render the income distribution more equal.[18]

Present housing policies create many horizontal inequities. For example, rent control creates serious inequities between tenants of controlled and uncontrolled apartments, and between longtime residents of a city and new arrivals. It also creates serious inequities between landlords, who have their capital invested in the rental housing market, and other investors, whose returns are not

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that the [exchange] value of the apartment will have risen, so that it is only just that the rent rise. But this simply illustrates the inconsistency between non-market views of justice and a market economy.

[18] This line of thought culminates in Rawls (1971), who argues that the only departures from strict equality which would be agreed to (by parties negotiating from behind a "veil of ignorance" about their own position) would be those which tend to raise the consumption of the least favoured members of society. See Stanbury (1985, v.2, ch.3)

affected by rent regulation. But rent control is not alone in creating problems of equity. Public housing and rent-geared-to-income units in non-profit and co-operative housing are allocated on the basis of lengthy waiting lists. Since not everyone who is eligible obtains a subsidized apartment, horizontal inequities are created.

There have been some attempts to measure the degree to which rent control has redistributed income among tenants and between landlords and tenants. These are reported in Stanbury and Vertinsky (1985, 6-109 to 6-119). Their fundamental conclusion is that the bulk of benefits from lower rents accrue to tenants in the higher income categories. For example, they estimate (p. 6-112) that fewer than 40% of renter households with incomes above 20,000 in 1981 received 60% of the benefits of rent control, while the 44% of tenants with annual incomes below $15,000 received only 16.5% of the total benefits. This anomaly arises because the estimated gap between controlled and equilibrium market rents is much less for low-income households than for high-income households.

Other studies have come to less dramatic conclusions. The three studies reviewed by Slack and Amborski (Fallis, 1981, Miron, 1981, and Blatt, 1982) and a fourth by Fallis and Smith (1985) all conclude that the overall pattern of benefits and costs from rent control is mildly progressive, in the sense that lower income groups benefit by a larger fraction of their income than do higher income groups. The two positions can be reconciled by noting that Stanbury and

Vertinsky focus on the distribution of the dollar amounts of benefits received, while the remaining studies focus on the ratio of benefit to income in each category.

Some studies (Smith and Tomlinson, 1981, and Blatt, 1982) have investigated whether rent review has lead to a decline in the capital value of rental apartment values. Smith and Tomlinson (cited by Slack and Amborski, p. 39) show that the ratio of the unit price of rental apartments to that of residential dwellings and condominium apartments declined steadily over the period 1974-1980. As pointed out by Slack and Amborski, these studies do not attempt to measure the dollar amount of capital losses. A further point not stressed in previous submissions to the Inquiry is that capital losses reflect the capitalized value of future rental income losses. To count both in computing the redistributive effect of rent control is to count the same thing twice.

While all authors appear to agree that there has been some income redistribution caused by rent review as practiced in Ontario, the average dollar amounts involved are small as percentages of income. Thus Stanbury and Vertinsky (6-117) cite Blatt's 1982 finding that the net beneficiary groups gain no more than $46 per year and conclude with her that "while redistribution occurs it has so small an impact upon the average household... as to make it seem a waste of effort". Of course, small changes in the average position of any income groups may mask very large changes in the welfare of particular individuals within the group. Accordingly, we may conclude that rent regulation in Ontario has not contributed significantly to overall vertical equity in the distribution of income and may have worsened the horizontal equity.

In summary, the present rental housing market exhibits a large number of horizontal inequities. Many of these are created by the present system of rent review, which discriminates against those unable to find accommodation at controlled rents and against investors in real estate. Other serious inequities are created by the fact that there are not enough public housing and rent-geared-to-income units to provide subsidized accommodation for all those who are eligible. Finally, although present rental policies provide significant benefits to their recipients, there is no evidence that they have made the income distribution significantly more progressive.

7. Least Cost Production

As noted in Chapter 1, the overall goal of economic efficiency requires that there be no waste in the construction of new housing, that is, that the housing be constructed at minimum cost. Similarly, the existing housing stock should be maintained at minimum cost. This is not the same as requiring that housing be of low quality, but rather that whatever quality is chosen be built and maintained at lowest achievable cost. This is a desirable goal for two reasons. First, since in the long-run the price of rental accommodation will be determined by the cost of providing new rental units (see Chapter 3), production of rental units at least cost will tend to lower the rents, to the benefit of renters. Secondly, to the extent that rents in the short-run exceed the costs of providing rental accommodation, landlords make a profit. This profit is a contribution to national income and is partially redistributed to others through the tax system and through increased profits and wages in those areas where landlords spend their money. Finally, in the case of subsidized housing, low production and maintenance costs reduce the public subsidy required and hence reduce the burden on the taxpayer of assisting any given amount of housing.

Although one frequently hears that building costs have been rising rapidly in Ontario, the evidence is not conclusive. Although some indexes of construction costs have risen faster than the general price level, others have not. For example, Table 2.23 reports indexes of construction, material and land costs for single detached housing over the period 1971-1982. Although higher than the general price index throughout most of the 1970's, by 1982 the combined construction and materials cost index had declined to 93% of the general CPI by 1982. Land prices had escalated noticeably less rapidly than inflation in Toronto and more rapidly in Ottawa.

Table 2.24 suggests a significant discrepancy between cost performance in townhouse and apartment structures. Expressed at 1984 prices, construction costs per square metre for townhouses appear to have declined significantly since 1980 while the cost of apartment units in buildings over 10 stories has risen 10% from $320 in 1980 prices to $352. This suggests either weaknesses in cost control or a shift to more expensive units.

Several authors have expressed concern that building costs in non-profit rental housing units are excessive. Table 2.25, drawn from the CMHC (1983) evaluation of non-profit housing programs, provides some evidence on this score. It compares the average cost per square metre of projects undertaken under the non-profit and co-operative housing programs with projects insured under section 6 of the National Housing Act. Apartments constructed in Ontario under the former programs were 52% more expensive to construct. CMHC (1983, 128) suggests that since maximum assistance is provided when unit prices are at the maximum allowable, there is no incentive under the non-profit and cooperative housing program to reduce costs below that figure. Operating costs are also much lower in section 6 projects than in section 56.1 projects (p 141), but these in turn are less than those in public housing projects (p 145). Comay (1984, 22) claims that there is no serious incentive for cost saving practices in non-profit buildings operating under the current rules.

TABLE 2.23: BUILDING COST INDEXES; ONTARIO, 1971-1982. (1)

YEAR	CPI	CAPITAL COST INDEX	BUILDING INPUT INDEXES(1) LABOUR	MATERIAL	COMBINED	LAND INDEXES(2) OTTAWA	TORONTO
1971	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	104.8	103.6	114.1	105.2	109.0	115.1	113.0
1973	112.7	107.4	125.6	123.5	123.5	157.4	134.8
1974	125.0	113.2	136.1	134.9	134.5	217.3	164.3
1975	138.5	122.1	148.7	138.8	141.6	228.6	170.7
1976	149.0	131.1	168.3	151.0	156.4	269.5	185.2
1977	160.9	139.0	188.4	160.8	169.9	294.6	188.3
1978	175.2	153.2	198.8	179.0	185.1	294.6	189.8
1979	191.2	166.5	212.6	203.0	205.2	296.5	190.0
1980	210.6	186.0	226.0	212.7	216.2	301.1	192.2
1981	236.9	209.8	244.3	234.1	236.4	317.8	197.0
1982	262.5	247.0	264.6	243.6	249.7	332.1	194.3

NOTES: 1. BASED ON LABOUR AND MATERIAL INPUTS FOR A TYPICAL SINGLE DETACHED HOUSE.
2. PRICES PAID FOR PARCELS OF LAND USED IN LARGE SCALE NEW HOUSING PROJECTS. OTTAWA LAND INDEX INCLUDE HULL.

SOURCE: DERIVED FROM STATISTICS CANADA, CONSTRUCTION INDEXES, 62-007. AS FOUND IN PRINGLE 1985.

TABLE 2.24: RESIDENTIAL CONSTRUCTION COSTS; TORONTO REGION, 1980-84.

Year(1)	Apartments and Condominiums Under 2 Stories	2-10 Stories	over 10 Stories	Town Houses
	(current $ per square metre)			
1980	239	299	285	296
1981	256	320	305	312
1982	286	358	341	350
1983	307	383	375	374
1984	344	441	431	374
	(constant 1984 $ per square metre)			
1980	269	336	320	333
1981	256	320	305	312
1982	258	323	308	316
1983	262	327	320	319
1984	282	361	352	306

NOTE: 1. Estimates are for January of each year.

SOURCE: Derived from Toronto Real Estate Board, House Price Trends.

Further evidence that both capital and operating costs are higher in public projects comes from the City of Ottawa Department of Community Development (1985, 7). In response to a task force recommendation that the City concentrate on delivering social housing through purchase and renovation of existing buildings, the City's staff argued that both renovation and operating budgets would be about 50% higher than the task force estimates because of the higher standards expected of public landlords.[19]

The higher building costs for non-profit accommodation are offset in an accounting sense by generally lower land costs so that overall costs are equal or less than the CHMC maximum allowable costs (MUP'S). CMHC (1983, 127) suggests several reasons for this, but an important possiblity is that costs have been brought down in municipal projects by donations of land or sale at reduced prices. To the extent that this has occurred, the true opportunity cost of the non-profit housing has been underestimated. The effect may range from $1200 to $4500 per unit.

In sum, there is considerable evidence that building costs in non-profit housing have been distorted by the

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19. "The fact that the City is a public landlord and is expected by both tenants and the community to maintain its properties at a higher level of standard than the private landlord cannot be overly emphasized in terms of explaining the difference in the Task Force and City Living operating costs. City Aldermen and the Mayor are far more accessible and susceptible to complaint by the tenant or property owner next door than are private landlords. This, in turn, results in more and more pressure being applied to City Living to maintain certain standards and this results in increased operating costs." City of Ottawa Department of Community Development (1985, 9).

incentive structure built into the program. Moreover, operating costs in the public sector may be higher than those in the private sector, partly because of increased standards of maintenance. Evidence is not readily available on the efficiency of private operators. Nevertheless, since non-profit and co-operative housing has been a significant component of total additions to the rental stock in recent years, indications that it suffers from cost inefficiency are disturbing.

8. Respect for Other Social Goals

The provision of housing uses social resources which would otherwise be available to produce other goods and services which yield satisfaction to Ontario's residents. It would be unfortunate if so many social resources were used in providing houses that nothing was left for other needs. To illustrate by way of an extreme example we would not like to see expenditures on shelter equal to 75% of GNP.

While this observation is true regardless of whether housing is subsidized or not, it becomes a particular problem when subsidies to housing are made out of a limited public budget. If for political reasons it is not possible to increase the share of national income which is routed through the government, each dollar of spending on housing subsidies represents one less dollar available for such other public goals as health, education, transportation subsidies and environmental improvement. Clearly no one of these areas can be allowed to dominate public spending.

Therefore it is important to investigate whether public spending on support of rental housing is appropriate in light of other social needs. While the present study cannot identify an appropriate level of expenditure, we can hope to indicate the magnitude of the subsidy and whether or not it is likely to increase given current policies.

Data on socially assisted housing in Ontario was reported in Tables 2.7 and 2.8. Unfortunately, total public expenditures for housing programs in Ontario is not readily available. Some indication of the scale of socially assisted rental housing in Canada as a whole is given by Table 2.26 taken from CMHC (1983). It indicates that federal assistance to approximately 47,000 rental housing units was approved or committed in 1983. Of these, 10,241 were committed under the Canada Rental Supply Plan, which has now been discontinued. 1200 units were approved under the private rent supplement plan, which supplements the rent of low-income tenants occupying designated units in private rental buildings. 1400 public housing units were authorized, none in Ontario. Assistance for the rehabilitation of 12,628 rental units in older structures was provided: this program provides for forgivable loans of $2,500 and $3,750 respectively for private landlords and non-profit corporations. The major program, accounting for 21,500 or almost half of the total units, was the section 56.1 program of assistance to non-profit and co-operative housing. This program provides for the federal government to pay annual grants equivalent to the difference between mortgage payments actually incurred and a hypothetical payment based on a 2% interest rate.

Arthur Andersen Associates (1984) have estimated current and projected federal and provincial government expenditures to assist rental housing. Table 2.27 summarizes their data for 1982 and their projections for 1985 on the assumption that non-profit, co-operative, public housing and private rent supplement programs continue.

Inspection of Table 2.27 shows that total federal and provincial expenditures on assisted housing were expected to grow from $1.3 billion in 1982 to $1.5 billion in 1985. Under this scenario, the share of provincial governments would drop from 36% to 24%. (One may wonder whether the federal government will permit such a lop-sided sharing arrangement in a time of "fiscal restraint"). Further inspection indicates that 12% of the projected expenditures for 1985 are associated with the now terminated MURB program and that the rest is effectively split between public housing and the non-profit/co-operative programs. It is difficult to identify Ontario's share in these programs but CMHC (1984) reports that in 1984 Ontario received no funding under the public housing program, $25.4 million under the residential rehabilitation program (this would include loans to homeowners) and $28 million under the headings of direct acquisition (s.55) and federal-provincial housing (s.40). In addition, since 1978 Ontario has received 25,813 of the total of 86,642 non-profit and co-operative units authorized under section 56.

TABLE 2.25: BUILDING COSTS; SECTION 56.1 AND SECTION 6. ($ PER SQUARE METRE)

Region/ Building Type	1979 Sec 56.1	 Sec 6	1980 Sec 56.1	 Sec 6	1981 Sec 56.1	 Sec 6
All Building:						
Atlantic	- -	298	479	279	542	382
Quebec	378	242	397	284	469	293
Ontario	406	314	455	289	- -	384
Prairies	406	367	577	340	473	333
B.C.	571	333	650	327	645	385
Apartments:						
Atlantic	- -	298	- -	261	- -	379
Quebec	373	242	396	223	472	281
Ontario	367	308	484	317	- -	391
Prairies	376	361	599	289	- -	296
B.C.	596	334	701	323	647	374

Source: CMHC Section 56.1 & Section 6 administration data; as found in CMHC, 1983.

TABLE 2.26: RENTAL HOUSING UNITS COMMITTED OR APPROVED; CANADA, 1976-1983

PROGRAM	1976	1977	1978	1979	1980	1981	1982	1983
Old Non-Profit	10,093	6,273	3,125	- -	- -	- -	- -	- -
New Non-Profit	- -	- -	2,965	16,642	24,907	22,243	22,778	21,500
Public Housing	11,328	9,022	16,766	4,570	4,282	2,983	2,760	1,400
Private Rent Supplement	2,673	2,880	5,396	4,022	1,250	734	1,293	1,200
Residential (2) Rehabilitation	4,337	9,175	10,163	5,076	8,461	7,789	8,674	12,628
Assisted Rental Program	25,231	56,905	17,483	- -	- -	- -	- -	- -
Canada Rental Supply Plan	- -	- -	- -	- -	- -	- -	10,697	10,241
MURB's	35,219	82,265	80,089	76,550	- -	44,382	- -	- -

NOTES: 1. These figures should be used with caution for several reasons:
all units committed or approved may not have been built;
the year of start or completion may not be the year of commitment or approval;
some rental housing units may be included in more than one program.
2. For Assistance Rental Program.

SOURCE: CMHC, 1983, p.

TABLE 2.27: ESTIMATED FEDERAL AND PROVINCIAL EXPENDITURE TO ASSIST RENTAL HOUSING; CANADA, 1982, 1985.

	1982		1985(E)	
Program	$000'S	% of Total	$000'S	% of Total
Non-Profit/Co-op	201	15.46	642	41.37
Public Housing	667	51.31	637	41.04
Rent Supplement	47	3.62	20	1.29
Federal Programs	51	3.92	76	4.90
Tax Expenditures	273	21.00	183	11.79
Total	1,300	100.00	1,552	100.00
Federal / Provincial Shares				
Provincial	453	34.85	372	23.97
Federal	847	65.15	1,180	76.03

Source: Arther Anderson, 1984.

TABLE 2.28: ESTIMATED SUBSIDY (1) BY HOUSING PROGRAM; CANADA,1983

PROGRAM	PRESENT VALUE OF TOTAL SUBSIDY PER UNIT	PRESENT VALUE PER INCOME TESTED UNIT
NON PROFIT/ CO-OPERATIVE	$46,911	$92,893
CO-OPERATIVE	46,911	105,418
PUBLIC HOUSING	72,470	72,470
RENT SUPPLEMENT	96,513	96,513
MURB'S	8,600	- -
CRISP	8,747	- -

NOTE: 1.FOR A HYPOTHETICAL 20 UNIT TOWNHOUSE PROJECT. IN CURRENT DOLLARS.

SOURCE: CMHC, NON-PROFIT AND CO-OPERATIVE EVALUATION; AND CLAYTON, 1984.

The subsidies per unit under these rental programs can be very high. Clayton (1984) has reworked data from CMHC comparing the subsidy required on a 20 unit townhouse project with capital costs, operating costs and rents equal to the average levels for non-profit housing in 1981. The assumed capital cost was $55 thousand per unit, interest rates were assumed to be 13% per annum and rents and operating costs were assumed to grow at 8% per year. Table 2.28 summarizes the results.

The present value of the total subsidy is expressed in two ways: as an average per unit and as an average per rent-geared-to-income (RGI) unit. The number of units available for RGI tenants varies with the housing program involved.

The results are dramatic. Under the assumptions made, the non-profit and co-operative programs provide the equivalent of a capital grant of about $47 thousand per unit, or 85% of its construction cost. Expressed as a subsidy per RGI unit, the cost is about double the capital cost of the unit itself. Of course, any subsidy to provide market rents is expensive when capitalized. The rent supplement program costs about $96 thousand per RGI unit.

Clayton notes that these data, especially relative to the rent supplement program, are sensitive to the assumptions made, and that not all alternative policies are incorporated in the illustration. For example, income tested units (i.e. RGI units) can be provided more cheaply under both the rent supplement and the non-profit program if existing housing is used.

To summarize, subsidies to rental housing are now a significant component of government expenditure. The federal share of these subsidies is about 3% of the federal government's deficit. The major federal program provides a subsidy of over three quarters of the capital value of a new rental unit, with much of the subsidy devoted to subsidizing the rents of middle income tenants rather than the truly needy. It seems clear that the problem of affordability and availablity of rental housing cannot be met by expanding this program without seriously detracting from funds available for other social programs. Consequently we may conclude that the extent of public subsidies to housing raises a clear question of social priorities.

D. Summary

In this chapter we have provided the empirical background for the remainder of the study. We examined first the evolution of the rental housing stock in Ontario since 1961, secondly the evolution of rents over the same period, and finally the performance of the rental housing market judged on our chosen criteria.

We concluded that tenant households generally have been rising as a fraction of all households and now account for slightly more than one-third of the total. Although most tenants inhabit apartment buildings, significant numbers occupy single detached, semi-detached and row housing. The rental housing market has, on occasion, sustained annual growth rates of up to 6% over a five year period. In each five year period since 1966, socially assisted housing has accounted for twenty percent or more of the total growth in the rental stock. There is some evidence that demolition and conversion of rental units suitable for low income tenants is significantly reducing the stock of these units.

Average rents adjusted for the effects of inflation have declined since 1973 and probably since 1961. Statistically, increases in rents follow increases in the general price level with a considerable lag. The presence of rent regulation has not dramatically altered the statistical relationship between rent increases, inflation, and vacancy rates.

Measured vacancy rates are at historical lows, indicating that there is a clear problem of availability for some forms of rental accommodation. Affordability is also a major concern in Ontario, where between 150,000 and 200,000 households are in core housing need.

Episodes of rapid increases in average rent levels occured around 1966-68, 1974-76, and 1981-83. The last episode indicates that the present form of rent regulation does not guarantee freedom from rapid rent increases. All three episodes typically followed unanticipated bursts of inflation. Rent gouging, defined as a rapid increase in individual rents, cannot be directly observed from these aggregate data, but casual observation suggests that the two are correlated.

Security of tenure, defined as freedom from arbitrary eviction, was not considered to be a serious problem in Ontario. Fear of "economic eviction" while real, is best considered an aspect of affordability.

Social diversity and integration are not easily measured, but at a broad neighbourhood level this study found no evidence of increasing segregation by income class in Metropolitan Toronto. At the level of individual projects, newer forms of socially assisted housing have decreased the degree of segregation.

The present rental housing market exhibits a large number of horizontal inequities. Many of these are created by the present system of rent review, which discriminates against those unable to find accommodation at controlled rents and against investors in real estate. Other serious inequities are created by the fact that there are not enough public housing and rent-geared-to-income units to provide subsidized accommodation for all those who are eligible. Finally, although present rental policies provide significant benefits to their recipients, there is no evidence that they have made the income distribution significantly more progressive.

There is some evidence indicating that public rental housing in Ontario is not being produced at least cost. In addition, subsidies to rental housing are now a significant component of government expenditure. It seems clear that the problems of affordability and availability of rental housing cannot be met by expanding present programs without seriously detracting from funds available for other social programs. Consequently we may conclude that the extent of public subsides to housing raises a clear problem of respect for other social goals.

CHAPTER III

THE MARKET FOR RENTAL HOUSING

In Chapter II we evaluated the performance of the rental housing market in Ontario on a number of criteria and identified several areas in which objectives for the rental housing market were not being met. In Chapter IV we consider which of these areas will continue to pose difficulties in the future and what other problems may arise. To do so we must have some idea about how the rental housing market operates. This idea is our theory of the rental housing market.

The rental housing market is complicated by the fact that rental housing is extremely varied in location, size, design, amenities, age and other characteristics. It is also complicated by the facts that information about alternative accommodation is sometimes difficult to obtain, that the costs of moving may be substantial to the tenant and significant for the landlord, and that a basic minimum of shelter is a condition for survival. Any attempt to deal with all these complexities at once is bound to lead to a very complicated theory of how the market operates. Such a complex theory may be difficult to understand and communicate and may be open to challenge on many particulars. This may obscure the fundamental conclusions implied by the theory, conclusions which may be drawn from any of a number of complex theories of the rental market.

Rather than attempt to capture all the complexities of the rental market at once, it is better to begin with a very simple description (or model) of how the market operates. One can then investigate whether any of the obvious complications affect the basic conclusions of the simple model.

There is a simple model of the housing market which is easily understood and is accepted as a good first approximation to the behaviour of the rental housing market by most economists. It is simply a restatement of the model of perfect competition found in any economics textbook, and it underlies virtually all the policy advice given by housing economists. Because it is so simple and so commonly accepted, it has not been explicitly treated in much of the research undertaken for the Inquiry. Nevertheless it is a powerful tool for isolating the key forces which determine how the rental market will evolve. Consequently it is useful to present the model explicitly and to consider how far we may rely on it to draw conclusions about public policy.

Part A of this chapter presents this model of the rental housing market and considers some possible complications. A common objection to the model is that the rental housing market is imperfect because the product is not uniform and because landlords exercise monopoly power. Part A rejects these arguments on theoretical grounds. Part B considers the structure of the rental housing market and concludes that, in any case, conditions in the rental housing market do not deviate from competitive requirements sufficiently to invalidate the competitive model as a guide to public policy.

Having accepted the competitive model as a guide, we need to know the approximate value of certain key parameters such as the elasticity of supply and demand and the relation between current, market clearing and economic rents. These are discussed in Part C.

A. Some Theory

1. A Simple Model

The main features of the rental housing market can be understood by reference to the standard model of perfect competition found in any economics textbook. Because we have set aside many subsidiary complications, the predictions of the model must be understood as general tendencies to be interpreted within the context of a particular problem rather than immutable laws with precision comparable to that of experimental physics.

We must first agree temporarily to abstract from the complications of size, location, quality, etc. and to pretend that each rental unit is like every other unit in all respects. This limitation will be removed in the next subsection. Rental units are items of capital equipment which must be combined with supplies, labour and administrative skills to provide the housing services which are desired by tenants in exactly the same way that the managers of a hotel combine a physical structure, dining and recreational facilities, cleaning and maintenance to provide the services of a hotel room for one night. Neither the tenant of a rental unit nor the occupant of a hotel room purchase the physical structure which they inhabit, but rather a package of services extending over a specified length of time.[1]

One rental dwelling unit, when combined with a standard level of common amenities, maintenance and other items and occupied for one month, yields a quantity of housing services which we can describe as one dwelling-unit month.[2] Thus one thousand such units would yield a flow of housing services equal to 1000 dwelling-unit months of housing services per month. The units of time cancel out and we speak more readily of 1000 dwelling units, but this usage tends to obscure the fact that it is the services yielded by rental units which are being exchanged on the market rather than the physical units themselves.

The price paid for one dwelling-unit month of services is the rent.[3] Other things being equal, fewer housing services will be demanded at high rents than at low rents, because some individuals will choose to share accommodation

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1. Of course, the length of tenure is much greater in the case of most residential tenancies.
2. Although awkward, this term is parallel to that used for electricity (one kilowatt-hour is the service yielded by one kilowatt of power delivered for one hour) and railway transport (one ton-mile is the service of moving one ton of freight for one mile).
3. Those who share the author's obsession with units of measurement will note that rent is measured in dollars per dwelling-unit-month, which can be rearranged to yield the normal dollars per month per dwelling unit.

with others rather than to maintain their own households.[4] This relationship is shown by the demand curve D_t in Figure 3.1. At the same time, more housing services will be supplied from the existing stock of buildings when rents are high because more owners of housing that can be easily converted for rental purposes will consider it worth their while to do so. This relationship is shown by the short-run supply curve SRS_t in the same figure. Where the two curves cross, the quantity of rental housing services demanded equals the quantity supplied. Everyone who wishes to lease a unit at the corresponding market clearing rent, r_m, can do so, and everyone who wishes to let a unit at the same rent can also do so. We predict that in an uncontrolled market rents will gravitate toward r_m.

When rents are equal to r_m we say that the market is in short-run equilibrium. This is to be understood as consistent with a "natural" vacancy rate which landlords find profitable to maintain.[5] The natural vacancy rate is often said to be about 3%,[6] although in principle it might be sensitive to certain economic variables such as the interest rate.

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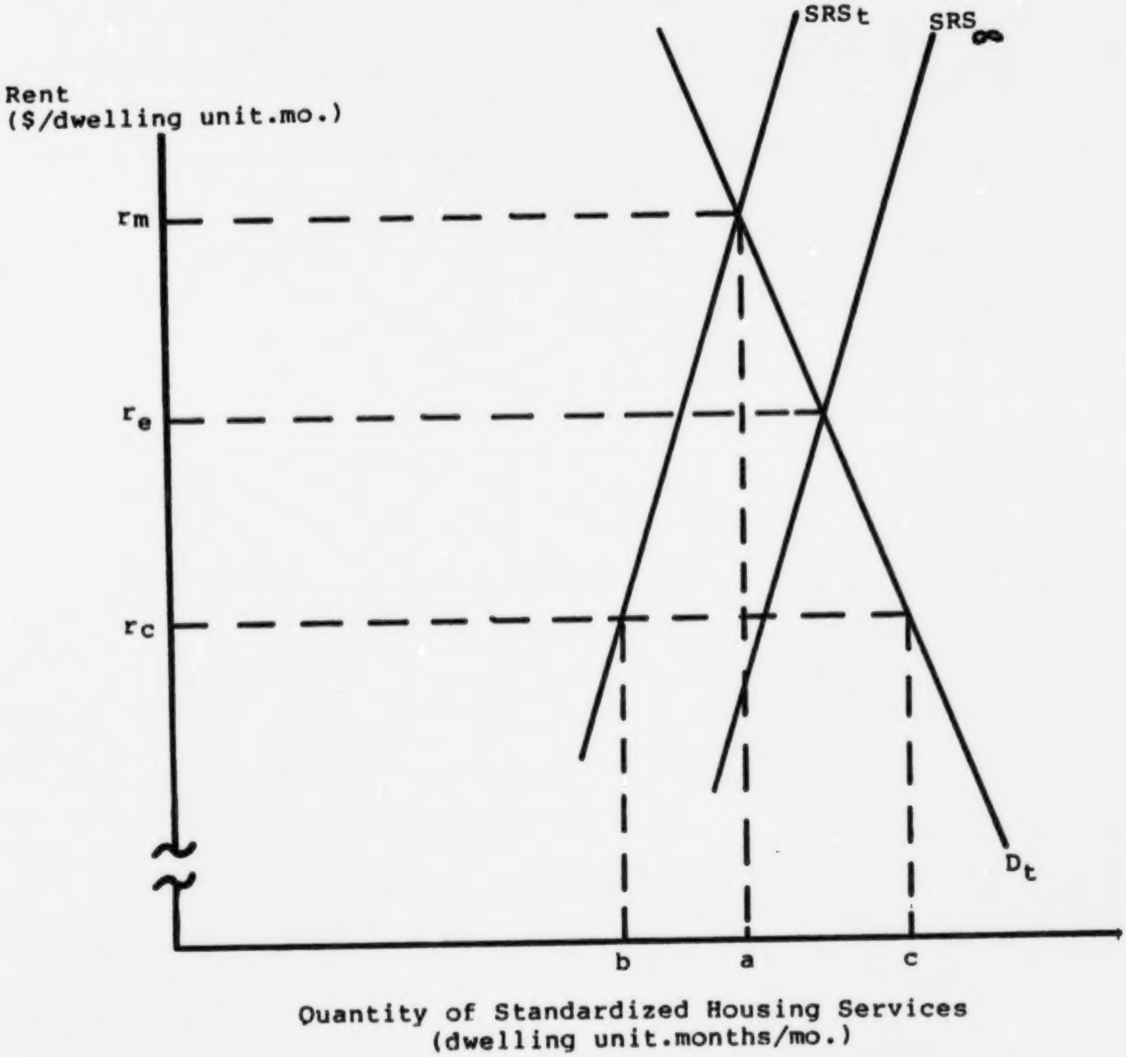
4. Once we depart from the assumption that all dwelling units are alike, households may also wish to consume higher quality housing when the price falls.
5. Consider the analogy of a restaurant. While some find it worthwhile to maintain such low prices that there is always a queue to get in, others charge higher prices and usually have a table available. Some tenants will always be willing to pay slightly more for immediate occupancy.
6. See Smith and Rosen (1982). The regression of rents on vacancy rates reported in Chapter II implies a natural vacancy rate of about 3%.

FIGURE 3.1

COMPETITIVE RENTAL MARKET
CASE 1



At any time there is an economic rent, r_e, which is precisely sufficient to cover the full costs incurred by the landlord in providing rental housing. These costs include not only out-of-pocket expenditures on maintenance, administration and interest but also the earnings foregone by not employing his capital and labour elsewhere (often referred to as a "fair return").[7] The largest part of the landlord's capital is the value of his buildings and the land they occupy. The annual cost of this capital is the earnings which could be made by selling the property and investing the proceeds. When, for example, land costs in a city rise and hence the resale value of his buildings rises, the earnings foregone by the landlord increase and the economic rent increases.

Past capital gains and losses are irrelevant to the landlord, but a capital gain expected in the future is a benefit to the landlord which offsets some of the other costs incurred and hence reduces the economic rent.

If the economic rent is equal to the market clearing rent, landlords are satisfied with their position and no change occurs. In this case, we say that the market is in long-run equilibrium. Otherwise there are two cases: either the market clearing rent exceeds the economic rent or vice versa.

If the market clearing rent exceeds the economic rent, we have the situation depicted in Figure 3.1. In this case, rental revenues exceed the full cost of providing rental accommodation. There is an incentive for landlords to build new rental structures. As this occurs, the short-run supply curve gradually shifts right to SRS_{∞}. Rents gradually fall to the economic rent, r_e. The length of time required for this adjustment depends on how speedily new rental accommodation can be built. The speed of adjustment is probably fastest when market rents are well above economic rents, but it may be slowed down by municipal regulations or other impediments.[8]

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[7] Some adjustment should be made for differences in the risk of alternative investments.

If the market clearing rent is less than the economic rent, we have the situation depicted in Figure 3.2. In this case, rental revenues are less than the earnings which the landlord could obtain by selling his property and investing the proceeds elsewhere. In this case, landlords will gradually remove rental properties from the market. This can be accomplished by sale for non-residential use or conversion to freehold or condominium tenure. The short-run supply curve will gradually shift leftwards to SRS_{∞} and rents will slowly rise to r_e.

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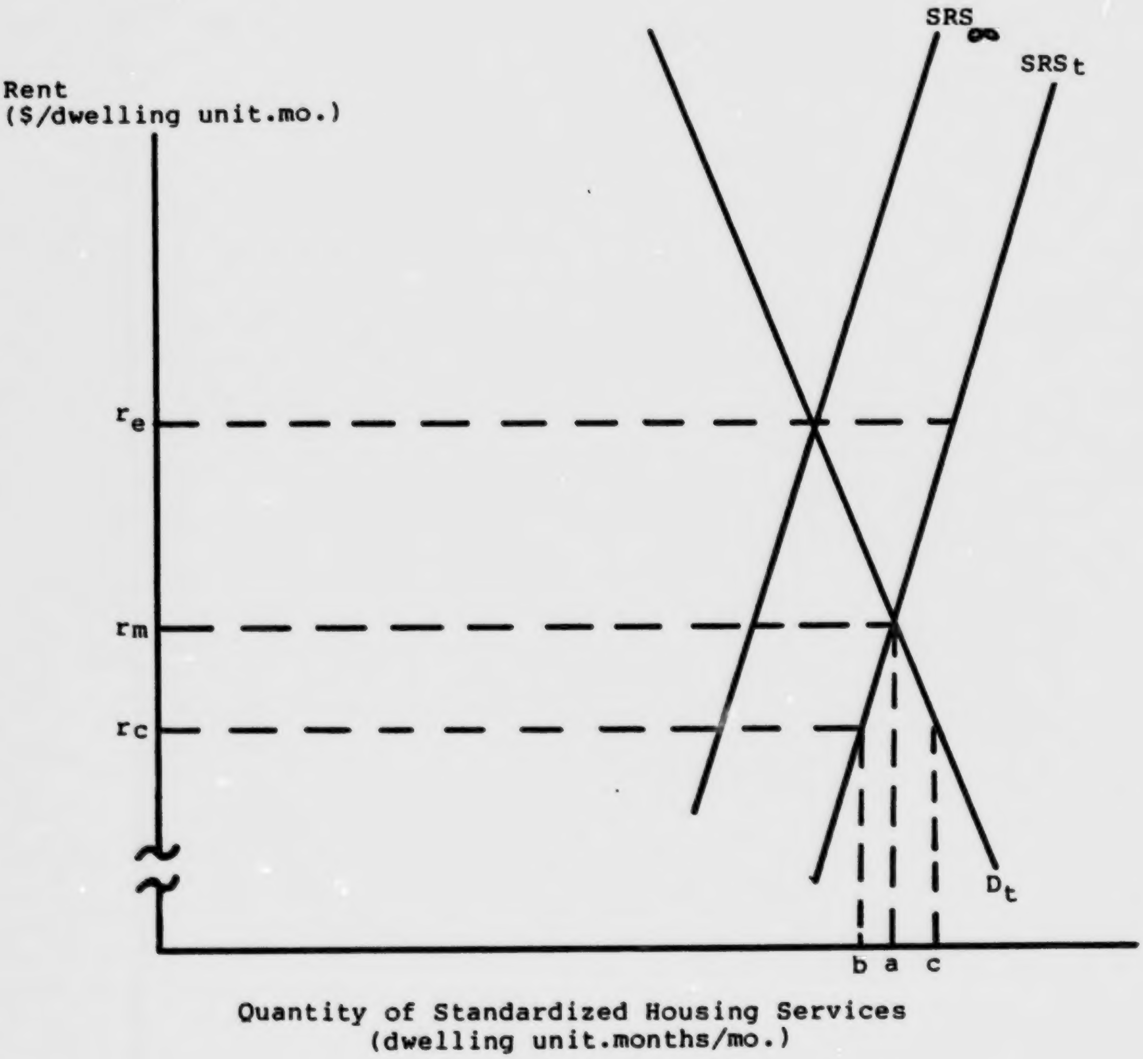
[8] The description so far presumes that the economic rent actually exceeds the market clearing rent. It is possible for developers to anticipate an expected increase in the demand for rental housing by building new rental units before the market rent has actually risen. In principle, future shifts in demand could be anticipated perfectly. The result would be a constantly changing stock of houses and an unchanging rent at the expected long-run equilibrium price. In the author's opinion, few markets are characterized by such perfect foresight.

FIGURE 3.2

COMPETITIVE RENTAL MARKET
CASE 2



This model yields a clear prediction about the effect of rent controls. If landlords are forbidden to charge more than a controlled rent, r_c, less than the economic rent, there will be consequences both in the short and long term.

In the short term, the quantity of housing services demanded will exceed the quantity supplied. In Figure 3.2, the excess of demand over supply equals the distance bc. It will no longer be profitable for landlords to maintain an inventory of vacant suites, since they can rent all their units at the controlled rent and they cannot increase the rents to accommodate tenants wishing immediate occupancy. Therefore vacancy rates will decline towards zero.

Not all the people who wish to rent housing services will be able to find accommodation. Among those who cannot will be some who are willing to pay more than the controlled rent. It will pay landlords to attempt to collect this money through strategems such as insisting that new tenants purchase furnishings at inflated prices. If sitting tenants effectively have the right to nominate their successors, they too will have an incentive to collect payments by similar means. Finally, since landlords have no difficulty in attracting tenants they are free to choose those who seem likely to be most satisfactory. They will have an incentive to exclude those about whom they know little (such as new arrivals without references), those who seem likely to impose higher costs (such as families with children), those who may not be able to pay future rents, or those who offend their personal prejudices.

In the long-run, the model predicts that there will be a continual decline in the rental housing stock as long as the controlled rent is below the economic rent. The speed of this decline will depend on the laws permitting conversion to non-residential use. If these are stringently applied, the stock may decline only very slowly. While r_c remains below r_e the capitalized value of net rents from the building falls short of the capital value of the land. Large profits can be made by anyone who is successful in avoiding the controls on conversion. Consequently one might expect continual legal and political action directed at relaxing zoning and other controls.[9]

If rent controls are relaxed or removed, the model predicts that rents will adjust rapidly towards the market clearing rent, r_m. If, at the time controls are removed, the market clearing rent exceeds the economic rent, as in Figure 3.1, new construction will be induced and rents will gradually fall towards r_e. If the market clearing rent is less than the economic rent, as in Figure 3.2, housing stock will continue to be withdrawn from the rental market. Rents will continue to rise slowly until the economic rent is reached. Thus in predicting the effects of relaxing rent controls, it is critical to know whether the economic rent exceeds or falls short of the market clearing rent.

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[9] This political activity is costly and will reduce the net profits to be made from lobbying. Some economists argue that there will be a tendency for the entire profit to be dissipated by the costs of these activities.

2. Complications

Although this simple model captures the fundamental characteristics of the rental housing market, it is subject to a number of complications and objections. These fall into two categories: complications arising from incorporating additional features into the model while retaining the basic perfectly competitive framework and objections arising from the neglect of imperfections in competition.

Extensions of the Competitive Model

Three complications of the competitive model deserve comment. They concern a possible difficulty in interpreting the economic rent relevant to a decreasing rental stock, the possibility of a decline in maintenance expenditures, and the possible presence of an uncontrolled sector parallel to the controlled sector of the rental market.

Most expositions of the concept of economic rent focus on the full cost of constructing a new rental unit. For example MOMAH (1982) calculates the economic rent by adding maintenance costs to the assumed amortization payment for a given capital cost. These costs include the cost of land and construction for new rental units. It is reasonable to wonder why such costs are relevant to the decision to withdraw rental housing from the market in the case illustrated in Figure 3.2. After all, one might reason, demolition and conversion are quite different from new construction. Would it not be possible to have a controlled rent which was below the economic rent for new construction but above the economic rent for demolition? Under these circumstances the housing stock would not grow, but neither would it decline.

This objection has some merit. The capital costs relevant to calculating r_e in the case of Figure 3.1 include the cost of land plus the cost of construction. The capital costs relevant in Figure 3.2 include the value of the raw land minus the cost of demolition, if required. The difference between these two costs leads to a range of rents for which neither construction nor demolition or conversion would occur. To recognize this in the diagram, however, would complicate the presentation without altering the essential fact that land prices can rise sufficiently to cause demolition to be profitable. In addition, conversion to alternative tenure may be possible at low cost. If so, the economic rent on an existing building will differ very little from the economic rent on a new building.

A second difficulty concerns maintenance. Much of the literature on rent regulation emphasizes the negative effects of rent controls on the maintenance of the rental housing stock,[10] but there is very little evidence that a noticeable reduction in maintenance has occurred in Ontario under the current system of rent review (Stanbury and Vertinsky, 6-41 to 6-68). The model developed above does not allow for changes in maintenance expenditures, since rental dwelling units are assumed to provide a standardized level of service. On an intuitive level, however, it is simple to understand why a decline in maintenance is expected. There is an excess demand for housing services at the existing level of quality. Consequently landlords can reduce maintenance expenditures without reducing rental revenue. As the general quality of housing services declines, we must redraw Figures 3.1 and 3.2. One way of doing this is to imagine a series of such diagrams, drawn for ever worsening qualities of rental housing. As more and more people were driven out of the rental market by deteriorating conditions, the demand curve would lie further to the left on successive diagrams and the gap between market clearing rent and controlled rent would decline. If the demand curve shifts left faster than rental housing can be withdrawn from the stock, the gap might be eliminated completely. In this case, the availability problem would have been solved by deterioration of the housing stock.[11]

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[10] See Adams, Ing and Pringle (1985, 7-19) for a review and references.

The importance of this discussion lies in the debate over whether rent review in Ontario has had a deleterious effect on the rental housing stock. One has the strong impression while reading Arnott (1981) that he is searching for a way to argue that rent controls are damaging despite the fact that at the time he was writing vacancy rates in Ontario had not yet fallen to unprecedented levels. Since then, as we have seen, average vacancy rates have been consistently lower than in the pre-review period, particularly in the controlled sector. This is consistent with the model outlined above and the need to rescue the theory from the data is perhaps diminished.

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[11] Following Frankena, Arnott(1980) considers such a case although he presents it differently.

In any case, elimination of excess demand through declines in quality is unlikely to occur while the net rental housing stock is declining rapidly. When rental buildings or the land they occupy have highly valued alternative uses they are likely to be sold rather than be allowed to deteriorate. This, coupled with complete pass-through of maintenance expenditures under the Ontario system of rent review, may have effectively prevented the emergence of a severe quality problem in the Ontario rental housing stock.

The third complication is the presence of an uncontrolled sector parallel to the rent controlled sector. Smith and Tomlinson (1981) provide an analysis which has been followed by Stanbury and Vertinsky (1985, ch 6) and others. The key point is that the market clearing rent (r_m in Figure 3.1) should not be estimated by the level of rents in the uncontrolled sector when one exists. This is because the presence of lower rents in the rent controlled sector will have increased the aggregate demand for rental housing, effectively shifting the demand curve in Figure 3.1 to the right. When rent controls are removed, the demand curve would shift left and the market clearing rent would be lower than that currently observed in the uncontrolled sector. Fallis and Smith (1985) estimate that in 1982 the market clearing rent in Ontario lay approximately half way between controlled and uncontrolled rents.

Market Imperfections

Some authors (eg. Hulchanski, 1985, ch.3) argue that rental housing markets deviate so substantially from the idealized competitve model that the inferences drawn from that model are highly suspect if not invalid. Others, such as Stanbury (1984, v.1, 4-21 to 4-25) suggest that the imperfect information and high transactions costs cited by Hulchanski are not unique to housing markets and imply that they should be discounted.[12] The rental housing market clearly does not conform completely to the competitive model. Our interest here is in whether the fundamental conclusions implied by the model of section A.1 must be modified to account for such market imperfections.

In the textbook model of perfect competition a number of extreme assumptions are made. These include uniformity (homogeneity) of the product exchanged, large numbers of buyers and sellers, and complete freedom of entry and exit from the industry. In addition, buyers and sellers are supposed to be fully and costlessly informed about the nature of the goods exchanged and the costs of changing suppliers and negotiating with buyers (transactions costs) are assumed negligible.

Merely to recite these conditions is to invite incredulity. Virtually no market in the world conforms completely to all of these conditions. Consequently we cannot deduce that any market is fully efficient in the sense described in Chapter 1. But to infer from this, as Hulchanski and others appear to, that the main predictions of the competitive model are incorrect or that government intervention in the economy is necessary is to misunderstand completely the role of assumptions in economic analysis.

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[12] See Adams, Ing and Pringle (1985) for additional references on market imperfections.

The model of perfect competition developed above predicted, among other things, that if the controlled rent is permanently held below the economic rent, the private rental housing stock will gradually be withdrawn from the market, that holding the controlled rent below the market clearing rent will normally lead to a rental housing shortage (as evidenced by very low vacancy rates), and that removing controls will restore normal vacancy rates and may or may not stimulate new rental construction. The assumptions of perfect competition are sufficient to reach these conclusions, but they are not necessary. That is to say, there may be many other circumstances in which essentially the same conclusions about the effects of rent control may be reached. We must consider whether any of the imperfections noted need cause us to reject the conclusions reached earlier. Let us consider the problems of product differentiation (lack of uniformity), market power (small numbers of buyers and sellers), imperfect information and transactions costs in turn.

Rental housing units are differentiated by size, location, amenities, age, maintenance services and other characteristics. Since no rental unit is exactly like any other, the owner of each unit is in effect a monopolist, but a monopolist competing with many other monopolists who offer similar but not identical services. The theory of monopolistic competiton has been developed to deal with such cases.[13] Although the details of the theory are more complicated and some of the results less certain, the basic conclusions derived for the competitive model continue to hold.

In monopolistic competition, each producer's ability to choose prices independently is limited by the degree to which consumers are willing to substitute a competitor's product for the producer's own. When many competitors offer very similar accommodation, substitution between them will be easy and rapid. Consequently, while some landlords may be able to command a premium for their units because of outstanding service, location or amenities, their ability to alter the premium will be very limited.

In the long-run under monopolistic competiton, the entry of other landlords into the market tends to reduce each landlord's profits to near the minimum required for him to stay in business. Similarly, if a landlord's revenues fall short of his full costs, he will tend to withdraw his capital from the market. Since this mechanism underlies the adjustment to rent control and decontrol described above, the conclusions will not be fundamentally altered by the heterogeneous nature of the rental housing stock.

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13. See Chamberlin (1946) for the original exposition and J. Friedman (1983) for a discussion of recent theoretical developments.

It is sometimes alleged that only a few landlords control the majority of rental units in a large city such as Toronto, and that consequently one must apply the economic model of monopoly rather than that of competition or monopolistic competition. If a monopolist has significant flexibility in choosing prices, rent regulation can sometimes increase the supply of rental accommodation by removing the incentive to restrict the number of rental units offered, in order to raise rents. This argument, while valid in principle, is not likely to be applicable to Ontario. First of all, rent review can only increase the supply of rental housing if the monopolist is charging a rent above the economic rent. We shall see below that this is not likely the case in Ontario. Secondly, no one suggests that there is but one landlord in any Ontario city. To raise rents much above competitive levels, landlords would need to co-ordinate their actions. But theoretical and empirical considerations suggest that the difficulties of doing so increase very rapidly when there are more than two or three large monopolists, especially when the product is highly differentiated.[14] Finally, if a monopolistic firm's rents are held below its full cost, including a competitive rate of return on invested capital, there will still be a tendency for it to withdraw its rental capital from the market. Consequently the fundamental predictions of the competitive model are retained.

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[14] See Scherer (1980, ch. 6-8) for discussion.

The facts that landlords and tenants are not fully informed of each other's characteristics and of the availability of alternative opportunities and that both landlords and tenants may incur significant costs in moving do not alter the fundamental predictions of the competitive model although they do imply that tenants and landlords have some room for bargaining. If tenants would incur significant costs in moving from their present accommodation, landlords can raise rents to levels above the competitive levels. This ability, however, is limited by the landlord's inability to know all of the tenants' alternatives and the strength of their preferences. Similarly, an unwanted vacancy imposes costs on landlords partly in the form of administrative expenses but perhaps more significantly in the risk of acquiring an unsatisfactory tenant. The difference between the maximum a tenant would pay and the minimum a landlord would accept provides room for bargaining. Since tenants and landlords will differ in their bargaining skills, we would expect a relatively broad distribution of rents for similar units.

The range of potential outcomes caused by imperfect information and transactions costs does raise the possibility of exploitation of tenants who are poorly informed or have high transactions costs.[15] Exploitation in this context means charging a rent which is above the landlord's full costs or above the rents charged to occupants of similar units. It is thus a violation of the non-market principles of commutative and distributive justice referred to earlier. If such exploitation is a serious problem, there is a case to be made for rent arbitration. It should be noted, however, that some transactions costs for tenants are reduced when alternative rental accommodation is readily availability. Thus policies which lead to normal vacancy rates reduce the need for protection against exploitation.

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[15] Transactions costs include both the measurable costs of moving and so-called psychic costs. That latter refer to the real phenomenon that moving disrupts a tenants life in ways that are not easily measureable. Neighbours and schools are changed, friendly contacts at local stores are lost, and sentimental attachments broken. These costs are likely to be especially resented if a move is forced (through rent increases or eviction) than if it is voluntary.

Finally, we note that none of the difficulties associated with imperfect information and transactions costs alter the basic conclusions about controlled, market and economic rents reached from the competitive model. Thus the rental housing stock will still be depleted if controlled rents are held below economic rents.

B. Competition in the Market for Rental Housing

In the previous section we examined the argument that imperfections in the market for rental housing might invalidate the conclusions drawn from the competitive model of the housing market. We concluded that they would not. Since the issue of monopoly power is often raised, however, it is useful to investigate the degree to which rental markets in Ontario do approximate a competitive structure.

Two conditions are necessary if sellers in a market are to have the power to raise prices above competitive levels for a prolonged period of time. First, a small number of firms must account for a large fraction of the market and, secondly, there must be significant barriers to the entry of new firms when profits are elevated. Without the first condition, competition among existing firms will drive prices close to competitive levels. Without the second, the entry of new firms will drive prices down should incumbents firms attempt to raise them. This process of entry will be particularily rapid if there are no significant barriers to the exit of firms when profits are low. In this case the market becomes "contestable" and the threat of entry alone may be sufficient to maintain prices at competitive levels.

The degree to which a small number of firms account for a large fraction of the total market is called market concentration. Concentration is usually measured by the cumulative market share of a small number of largest firms.

There is surprisingly little information about concentration in the rental housing markets of Ontario cities. Markusen and Sheffman (1976) examined concentration in land development near Toronto in the early 1970's. Their results, reported in Table 3.1, indicate that the largest 6 development firms held 40.1% of a sample of developable lands in the region, after accounting for intercorporate linkages and excluding land not likely to be developed for 10 years. Although substantial, this is noticeably less than the average level of concentration in Canadian manufacturing industries.

Concentration in land development is not directly applicable to conditions in the rental housing market, because the land is being developed for ownership and non-residential purposes as well as for rental, and because the total rental housing stock is much larger than the additions to it, even over a period of 10 years. Table 3.2, drawn from Muller (1978), provides some indication of concentration in the development of new apartment units. It indicates that over a 30 month period from 1973 to 1975 there were 27 builders with individual market shares greater than 1% of condominium registrations. The largest 6 of these builders accounted for almost 24% of all condominium apartment units constructed in the region. Again, this is well below average industrial concentration ratios in Canada.

There are no reported estimates of concentration in the stock of rental units in Ontario. Some idea can be gathered from data reported by MOMAH (1983, 16-17), however. Their data indicate that in 1980, 74 of 5,778 landlords in the Toronto region were corporations with portfolios of more than 5 buildings. These 74 landlords (1.3% of the total) accounted for 20.7% of the 435,174 rental units identified. While this clearly demonstrates that a very small fraction of landlords hold a large fraction of the rental stock, it also demonstrates that the share of the largest 4 or 6 must be a relatively low percentage of the total.

TABLE 3.1: SIX FIRM CONCENTRATION RATIOS IN LAND OWNERSHIP.

Area	Full Sample	Restricted Sample	Full Sample	Restricted Sample
Total Sample	21.4	29.5	30.5	40.1
Brampton	44.4	58.1	51.1	66.6
Markham	32.9	56.3	38.2	62.7
Mississauga	45.6	58.4	49.5	61.9
Pickering (4 firm)	66.8	66.8	66.8	66.8
Richmond Hill	40.5	46.0	43.6	48.8

Source: Markusen and Scheffman (1976) as found in Muller, 1978, 59.

TABLE 3.2: CONCENTRATION MEASURES IN BUILDING, TORONTO CMA, 1973-1975

Region[a]	Total No. of Builders	All Units			Ground Units			Apartment Units		
		C_6	H	N	C_6	H	N	C_6	H	N
Toronto CMA	3,917	18.3	.0104	17 (31.5)	16.7	.0095	19 (36.1)	23.5	.0186	27 (54.9)
Durham	109	60.2	.0823	19 (92.3)	60.9	.0940	20 (92.9)	100.0	.5711	2 (100.0)
Halton	505	35.1	.0338	26 (72.4)	36.0	.0391	24 (69.4)	91.3	.1519	8 (99.5)
Metro	1,629	22.4	.0154	22 (44.4)	22.0	.0131	19 (41.3)	27.0	.0228	33 (68.5)
Peel	869	26.6	.0203	25 (59.5)	28.8	.0217	20 (53.8)	48.2	.0568	23 (96.3)
York	989	40.3	.0461	17 (61.8)	37.5	.0340	18 (59.7)	86.9	.2060	10 (99.9)

C_6 - Six Firm Concentration Ratio.

H - Herfindahl Index (the sum of squares market shares).

N - number of firms with market shares in excess of 1% (cummulative market share of these firms is given in parentheses).

[a] Only those municipalities which were also in the 1971 CMA are included in the entire for each region,

Source: Reproduced from Muller, 1978.

The traditional barriers to entry arise from absolute cost advantages of incumbent firms over newcomers including preferred access to large sums of capital, from economies of scale which cause an efficient firm to account for a large fraction of market size, and from product differentiation which effectively restricts the size of the market available to a new entrant. Economies of scale are clearly not a problem, since landlords can easily enter the market at small scale through purchase or new construction. There is no evidence that large landlords have compelling cost advantages over small ones and product differentiation, while present, still allows tenants a great deal of substitution among landlords. In short, there is no evidence to suggest that barriers to entry are significant in the rental housing industry.

Exit from the rental housing market through conversion to condominium or freehold tenure is easy provided it is permitted by law and there is a demand for ownership housing of the type in question. In fact, most municipalities have stringent by-laws restricting conversion when vacancy rates are low. The laws are binding on older buildings, but municipal housing officials report that most apartment developers now register a plan of condominium on all new apartment developments. This provides tax advantages and allows easy conversion of tenure should that prove desirable.

When conversion is effectively restricted, it may be difficult to sell rental buildings for anything approaching their capital cost. Under these circumstances, sunk building costs are a significant barrier to exit. Consequently the rental market is not contestable in the sense of Baumol (1983). While competition from actual entry into the market can be relied upon to limit rents, potential entry is probably not so important.

As a result of this review we may conclude that there are no empirical grounds to reject the basic conclusions of the competitive model because of imperfections in rental markets.

C. The Current Situation

The previous sections have demonstrated that the competitive model of rental housing markets can serve as a basis for discussing rental housing policies. Central to that model were the relationships between controlled, market clearing and economic rents and the separation of short-run and long-run adjustments. In this section we try to ascertain appropriate values for the various concepts of rent and, in particular, to judge whether conditions in Ontario rental markets are such that economic rents exceed market clearing rents or vice versa. As noted earlier, the level of market clearing rents relative to economic rents is critical in determing whether or not relaxation of rent controls would stimulate new rental construction.

To achieve this goal we consider first the sensitivities of the demand and supply schedules to changes in rent.

These sensitivities, or elasticities, help determine by how much rents will rise if controls are relaxed. We then consider the evidence on the relative levels of controlled, market and economic rents.

1. Demand Elasticities

The price elasticity of demand is the percentage by which the demand for rental housing services will decline if rents should rise by one percent and other prices should remain constant. It is important to note that among these other prices is the price of ownership accommodation. When the price of rental accommodation rises relative to the cost of owning a home it is to be expected that some renters will decide to purchase a house. Conversely, a rise in the cost of home ownership may be expected to raise the fraction of renter households. A rise in the price of both ownerhip and rental accommodation would lead to a fall in the demand for both.

Goodman and Kawai (1984, 1036) suggest that the current best estimates of the price elasticity of demand for housing lie between -.6 and -.7 for both owners and renters. This indicates that a 10% rise in rents relative to home ownership costs would lead to a decline of 6% or 7% in the quantity of rental housing demanded. Miron (1983) discusses both the theory and empirical estimates of the demand for rental housing, noting that almost all the empirical evidence comes from the United States. An important feature noted by Miron is that the sensitivity of rental housing demand to price depends on the demographic characteristics of the households involved. Tables 3.3 and 3.4 illustrate the point. According to an early study by De Leeuw, the price elasticity of demand for single person households was -0.94 while that for households with 3 to 4 persons was -0.69. In another study (reported in Table 3.4), Straszheim found dramatic differences in the tenure choice elasticity among households of varying characteristics. Married households with heads under 30 and no children had tenure choice elasticities of -1.25: a 10% rise in rents would reduce the tenancy ratio among this group by 12.5%. At the other extreme, changes in rents caused no response in the tenure choice of married households with children and heads over 40. Note that this does not mean that the consumption of housing services was insensitive to rent changes, simply that the household chose to consume less rental housing rather than to switch to ownership.

Miron notes that in all of the above studies, household composition is treated as a constant. He suggests there is reason to believe that household formation will be sensitive to price. If so, then the elasticities reported will be underestimates, particularly for the young and the elderly for whom shared accommodation is an important possibility.

It is difficult to summarize such diverse results in a single number. Nevertheless, Fallis' (1985) conclusion that there is "an emerging rough consensus that demand is price inelastic...in the range -0.7 to -0.9" may be accepted for the purpose of this report.

2. Supply Elasticities and Speed of Adjustment

In Figures 3.1 and 3.2 the short-run supply curve is drawn with positive slope, suggesting that an increase in rents would increase the quantity of rental housing supplied from units previously held off the market and units easily converted from other forms of tenure. Many authors (eg. Arnott, 1981) simply assume that this short-run response is negligible and draw a vertical SRS curve. Certainly there seem to be no studies of the elasticity of this curve, and it is perhaps best to consider it highly inelastic or vertical.

Again, there appears to be no published information on the rate at which the SRS curve shifts to the left or right to re-establish long-run equilibrium. The rate is influenced, of course, by laws and regulations restricting the rate at which approval is granted for new construction, conversion of tenure or demolition. In Chapter II we saw that the rental market has sustained rates of growth of up to 6% per annum in the rental stock at certain times in the past. This rate of increase is far beyond any that is likely to be required due to demographic shifts in the near future (see Chapter IV below).

TABLE 3.3: HOUSING EXPENDITURE ELASTICITIES. (1)

Persons per Household	Income Elasticity		Price Elasticity	
	Owners	Renters	Owners	Renters
1	- -	0.47	- -	-0.94
2	0.89	0.77	- -	-0.73
3-4	1.40	0.81	- -	-0.69
5	1.51	0.98	- -	-0.73
6 or more	2.01	0.72	- -	-0.68
All Households	1.34	0.81	- -	-0.71

Note: 1. Based on surveys of 19 U.S. metropolitan areas in 1960.

Source: De Leeuw, 1971 as found in Miron 1983, p44.

TABLE 3.4: INCOME AND PRICE ELASTICITIES. (1)

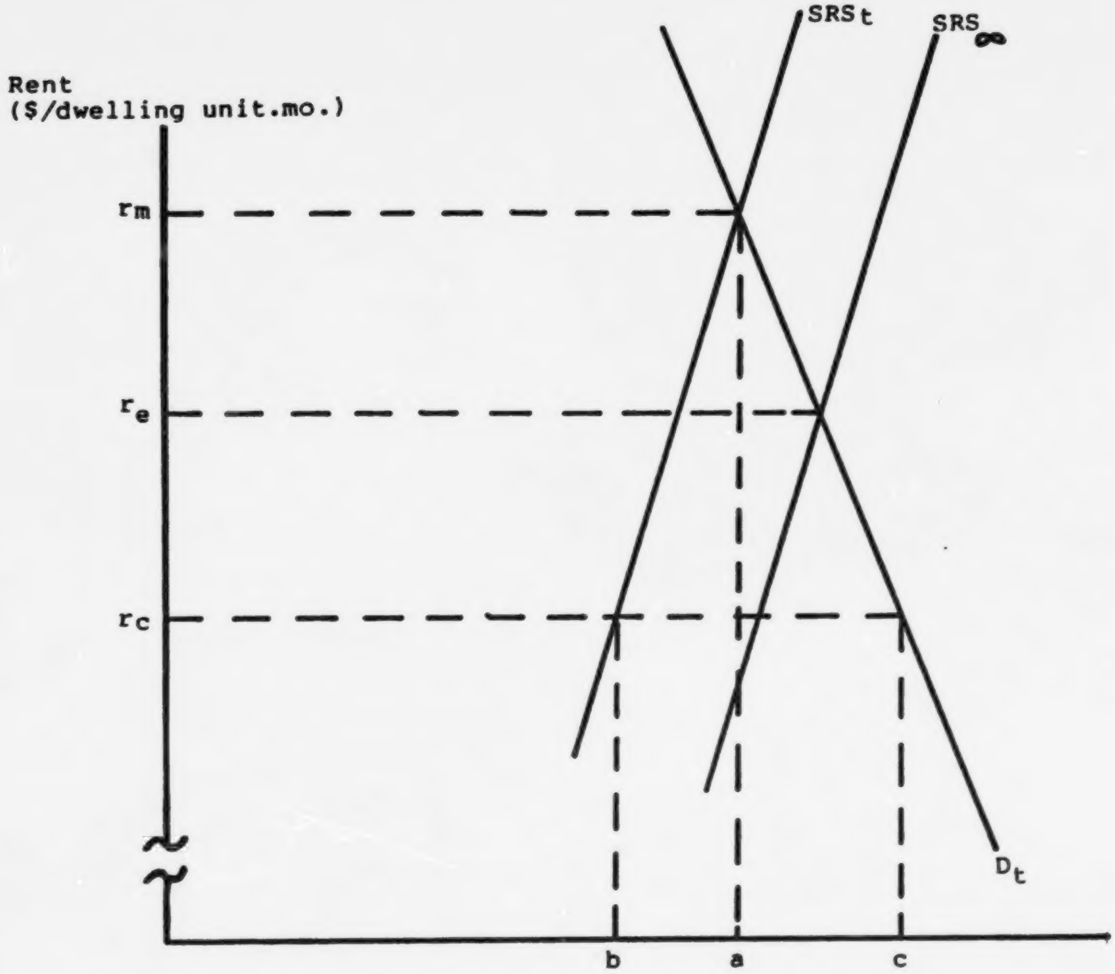
Marital Status /Age (2)	Household Type	Income Elasticity			Price Elasticity
		Tenure Choice	Rooms		Tenure Choice
			Own	Rent	
Single All Ages	Alone	0.762	- -	0.186	-0.372
	With Others	- -	0.076	0.093	-0.889
Separated All Ages	No Children	0.175	0.086	0.060	-0.721
	Childern	0.545	0.042	0.076	-0.564
Married Under 30	No Children	1.189	0.103	0.095	-1.257
	1 Child	0.848	0.076	0.069	-0.606
	2+ Children	0.701	0.100	0.102	-0.501
Married 30-39	No Children	0.487	0.063	0.093	-0.517
	1 Child	0.396	0.119	0.063	-0.462
	2+ Children	0.232	0.165	0.113	-0.209
Married 40-49	No Children	0.158	0.144	0.061	-0.103
	1 Child	0.117	0.136	0.222	-0.109
	2+ Children	0.114	0.184	0.150	0.000
Married Over 49	No Children	0.147	0.168	0.144	-0.240
	1 Child	0.060	0.157	0.180	-0.105
	2+ Children	0.132	0.257	0.088	0.000

NOTES: 1. "- -" means that the elasticity was not calculated.
2. Refers to age of household head.

SOURCE: Reproduced from Straszheim (1975: pp. 106, 107, 110), found in Miron 1983.

FIGURE 3.1

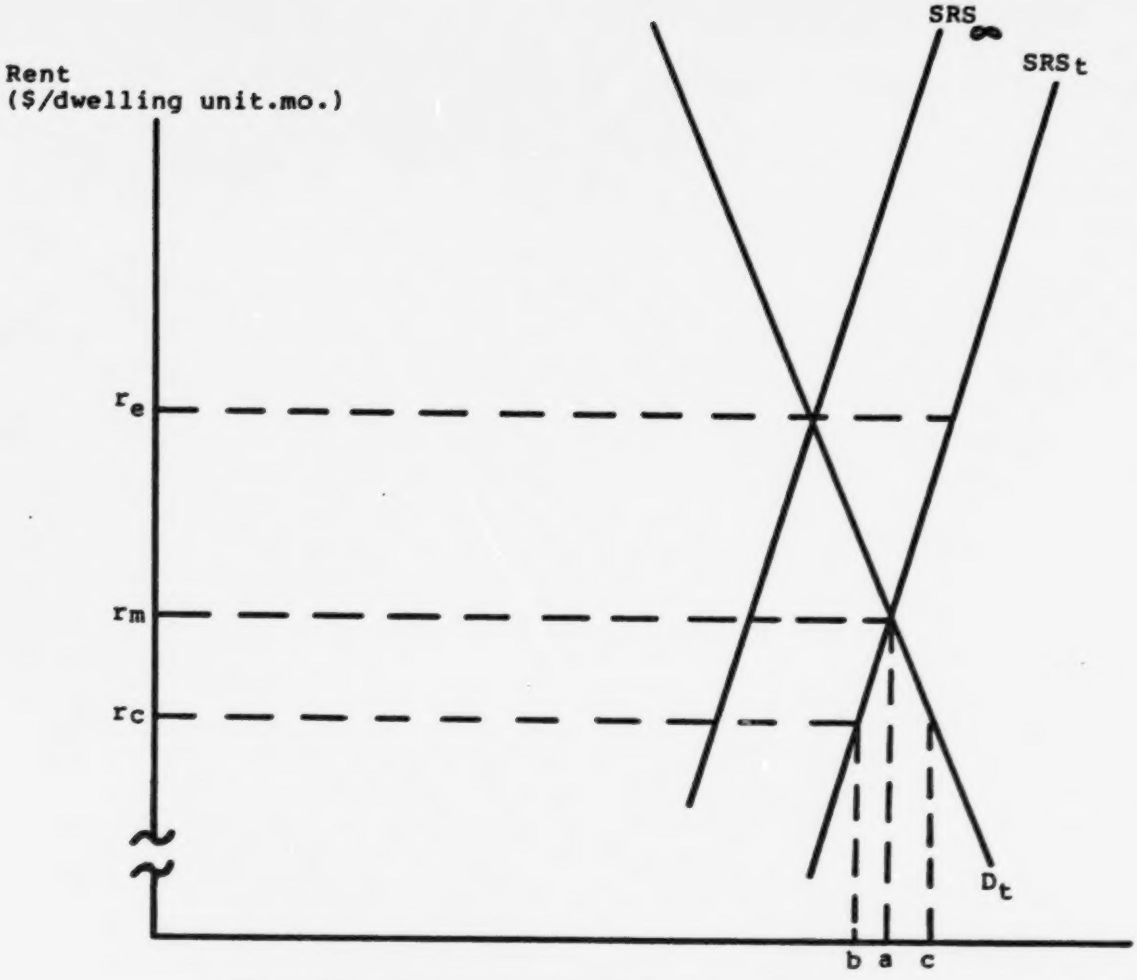
COMPETITIVE RENTAL MARKET
CASE 1



Quantity of Standardized Housing Services
(dwelling unit.months/mo.)

FIGURE 3.2

COMPETITIVE RENTAL MARKET
CASE 2



In the analysis of section III.A we assumed that, in the long-run, the economic rent was independent of the quantity of rental housing consumed. Technically, this assumes that the long run supply curve is infinitely elastic. This assumption will be violated if an increase in the quantity of rental housing drives up price of inputs which are particularly important in producing rental housing services. The most obvious example is the price of land. Fallis (1985, 56) performs illustrative computations which allow the price of land to rise as the quantity of housing services supplied increases. He concludes that the long run supply of housing is probably very elastic (with a value such as 8). The long-run supply of rental housing would be even more elastic, since it represents only one part of the total housing stock. These considerations suggest that our assumption of infinitely elastic long run supply is not seriously misleading.

3. Rents

In this subsection we consider first the probable relationship between controlled, uncontrolled and market rents in Ontario. We then consider some evidence on the cost of building and operating rental accommodation in the Toronto area and comment on the difficulties of calculating economic rents from this information. Finally we attempt to gauge the relationship among controlled, market and economic rents.

Controlled, Uncontrolled and Market Rents

There is clear evidence that by 1984 rents in uncontrolled Ontario apartments were much higher than in controlled apartments of the same size. As an example, Table 3.5 shows the average rents paid on controlled and uncontrolled 2 bedroom apartments in the CMHC vacancy survey. For October 1984 uncontrolled rents ranged from 19% higher in St. Catherines/Niagara to 56% higher in Sudbury. In Toronto uncontrolled rents were almost 40% higher than the controlled rents.[16]

It is tempting to use these data as an indication of how high rents would rise if they were decontrolled. Such an interpretation would be misleading for two reasons. First of all, the uncontrolled apartments (built since 1976 or with rents in excess of $750 in 1984) are newer than the controlled apartments or designed as luxury units and quite possibly both. Fallis and Smith (1985), in work reviewed for the Inquiry by Stanbury and Vertinsky (1985, v.1, 6-12 to 6-15), applied a statistical technique to account for the differences in quality between controlled and uncontrolled units. They found that from 30 to 60% of the apparent difference in rents was in fact due to rent controls.

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[16] With the announcement in June, 1985, that rent regulation would be extended to accommodation built since 1976, it was in the interest of landlords to raise substantially the rents on post-1976 units. This would raise the base rent upon which all future rent increases would be calculated. There is speculation that such increases have occurred, but this study obtained no documentation of them.

Depending on the details of the method adopted to control for quality differences, the rents in uncontrolled units were estimated to be from 14 to 29% higher than in units of comparable quality.

Even this lower estimate of the difference between controlled and uncontrolled rents should not be used as an indication of how far rents would rise under decontrol. As discussed earlier, Smith and Tomlinson (1981) have argued that in the case of dual markets, the market clearing rent will be intermediate between the controlled and uncontrolled rents. Fallis and Smith (1984, 57) estimate that for the Toronto market, the market clearing rent was in fact about halfway between the controlled and uncontrolled rents, with controlled rents about 11% lower than market clearing rents and uncontrolled rents about 10% higher.[17]

In summary, our best estimate is that, in 1984, market clearing rents on existing stock lay about 10% above the controlled rent on comparable units. Market clearing rents for new apartments would be somewhat higher, but probably below the reported average rents on the uncontrolled stock.

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17. This estimate was generated by comparing an estimate of actual increase in uncontrolled rents between 1975 and 1982 with an estimate of what the increase in all rents would have been if there had been no controls. No explicit consideration of the elasticity of demand was made in either estimate.

Ecomonic Rents

The degree to which economic rents exceed market clearing rents and controlled rents is critical for the analysis of rental housing policy. Unfortunately, there is no clear evidence on the precise level of economic rents. Moreover, some calculations of economic or "break-even" rents are misleadingly naive. In this subsection we consider evidence on the cost of constructing and operating modest rental accommodation in the Toronto area. We then consider some of the difficulties encountered in converting these costs to "economic rents". Finally, we present a range of estimates of the economic rent for new two bedroom apartments in suburban Toronto.

The Inquiry has received evidence on the construction cost and operating costs of rental accommodation from two knowledgeable participants in the industry. Mr. Goring[18] testified that land, construction, and other capital costs for a moderate 16 storey apartment building in the Brampton area would average approximately $57,385 per unit at 1985 prices. The building would contain 180 units, most with two bedrooms, with an average area of 825 square feet. Surface and underground parking, two appliances, open balconies and a central laundry are included. Operating costs would be $232.25 per month.

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[18] Evidence of Mr. P. Goring, October 15, 1985, and December 3, 1985, Transcript Vols. 118-2 and 127-2, and Exhibit 124, Commission of Inquiry into Residential Tenancies.

TABLE 3.5: RENT LEVELS(1) FOR 2-BEDROOM UNITS, BY REGULATORY STATUS
ONTARIO CMA'S, 1983-1984 (CURRENT DOLLARS)

	Oct. 1983			Oct. 1984		
CMA	Regulated	Unreg.	All Units	Regulated	Unreg.	All Units
Hamilton	- -	- -	- -	359	478	373
Kitchener	323	405	340	345	445	368
London	337	438	373	361	474	395
Oshawa	- -	- -	398	407	494	425
Ottawa	428	534	452	441	564	470
St. Catharines(2)	332	371	340	357	424	373
Sudbury	308	438	335	339	528	367
Thunder Bay	371	456	404	398	487	434
Toronto	427	581	453	447	618	479
Windsor	352	450	400	381	530	457
Unweighted Avg.	360	459	388	384	504	414

NOTES: 1. For privately initiated buildings containing 6 or more units. Based on a subsample of the rent surveys where a unit has been included in at least three consecutive surveys.
2. Includes Niagara.

SOURCES: Published and unpublished data provided by MMAH from CMHC rental vacancy surveys.

TABLE 3.6: COST OF TYPICAL, NEW TWO-BEDROOM UNIT,
METRO TORONTO, 1983(1)

Price	$64,000
Equity	10,000
25-year mortgage at 13% for 5 years	54,000
Monthly payments of principal and interest	595
Monthly operating expenses	275
Rent required to "break even"	870
Average rent of two-bedroom unit, Metro Toronto, January, 1983	407

NOTE: 1. With no government assistance

SOURCE: Ministry of Municipal Affairs and Housing, rental survey, January, 1983. Found in MOMAH, 1983, Table 19.

Mr. J. Bassel provided a similar estimate for a comparable building.[19] This building would be located in a suburb, near public transportation, and would contain between 150 and 200 units (40% 1 bedroom, 40% two bedroom, and 20% three bedroom). Public rooms and saunas, outdoor pool, private balconies, children's playground and central laundry are included. Units would have two appliances and the rent would include heat, power and water. The capital costs for an 800 square foot unit were estimated to be $54,000, with operating costs of $220 per month.

Difficulties arise in converting these costs into "economic rents", that is first year rents sufficient to induce private entrepreneurs to construct such accommodation. The difficulties arise from the need to forecast expected future developments, including changes in inflation, interest rates and rent regulation, and from the need to specify a required rate of return on invested capital.

These complications are often ignored in public discussion of economic rents. For example, MOMAH (1983, 43) estimates the rent required to "break-even" for a typical two bedroom unit in Metro Toronto with no government assistance (see Table 3.6). The break-even rent is calculated simply by adding monthly operating costs to the blended mortgage payment. This approach ignores the opportunity cost of equity funding (thus biasing the "break-even" rent downwards with respect to the true economic rent) and ignores the probable increases in rent which will occur due to inflation in the future (thus creating an upward bias in the estimate of economic rent).

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[19] Testimony of Mr. J.G. Bassel, November 28, 1985, Transcript Vol. 125-2 and Exhibit 117, Commission of Inquiry into Residential Tenancies.

"Break-even" rent considers only cash flow. The implicit assumption is that every rental building must break even in the first year of operation and that future rent increases will generate extra revenues to provide a return on the equity investment. Of course, there is no intrinsic reason why an entrepreneur might not construct a rental building on the expectation of several years of negative cash flow followed by a period of positive cash flow sufficient to compensate him for his investment. Thus the "break even" calculation is essentially arbitrary as an indicator of the rent which would induce a private agent to supply new housing.

A better indicator of the economic rent can be derived by requiring a rate of return on equity equal to the mortgage rate and assuming that rents and operating costs will increase at a constant rate. Table 3.7 provides such a calculation. The real mortgage rate is the difference between the nominal rate and the rate of inflation. At the time of writing mortgage interest rates are approximately 12% and the rate of inflation is approximately 4%. The real interest rate is therefore 8%. Table 3.7 indicates that when the interest rate is 8% the economic rent on a $64,000 rental unit would be $630 per month.[20] This is much less than the $870 per month break-even rent calculated by MOMAH.

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[20] In this example, rents would be $630/mo. in the first year. In the next year, both rent and operating costs would rise by the rate of inflation (4%).

A second method of calculating the required rent from estimates of capital and operating costs was used by both Mr. Goring and Mr. Bassel in their testimony before the Inquiry. In this method, one assumes a particular proportion of mortgage financing. The required rent is then calculated as the sum of mortgage payments, operating costs and a return on equity. Thus in his example, Mr. Goring estimated the required revenue per suite to be $720 per month. This was adjusted to allow for vacancy rates and miscellaneous revenues and allocated among apartments of various sizes to arrive at an average rent of $710 for a two bedroom suite. Similarly, Mr. Bassel computed an average rent of $680 per month. In both cases, it was assumed that the required return on equity was 8% per annum.

This procedure suffers from the same drawbacks as the "break-even" rent calculation. Under inflationary circumstances, both rental revenues and operating costs rise while mortgage payments remain fixed in nominal terms. As a result, the annual cash flow from an apartment building tends to rise, and the rate of return on equity investment increases. Thus under reasonable assumptions it can be shown that Mr. Goring's average first year rent of $720 per month implies an average return of over 18% per annum over the lifetime of the project.[21]

A third method of calculating economic rents from information on capital and operating costs is to make explicit assumptions about future developments and to compute the rental revenues which would yield a specific return on investment calculated over the life of the project. This is easily done using desktop computers.

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[21] See Appendix B.

Table 3.8 summarizes the results obtained by applying this method to Goring's cost data. The calculation required explicit assumptions about future interest rates, inflation rates, and rent regulation. It also required an assumption about the required return on equity investment.

In Table 3.8, it is assumed that the mortgage interest rate is 6.75 percentage points above the rate of inflation. Two rates of inflation are considered: a low rate of 4% and a high rate of 12% per annum. In addition two assumptions about rent regulation are made: "with controls" refers to a case in which rent regulation provides for a statutory increase equal to three quarters of the rate of inflation and "without controls" refers to a case in which both rental revenues and operating costs rise at the rate of inflation. Finally it is assumed that the required rate of return on equity investment lies between 2 and 4.25 percentage points above the rate of mortgage interest.

TABLE 3.7: THE EFFECTS OF MORTGAGE RATES ON MONTHLY RENTS.

	Mortgage Rate(1)						
Costs/Rents	4.5%	6%	8%	10%	12%	14%	19%
Capital Cost	$64,000	$64,000	$64,000	$64,000	$64,000	$64,000	$64,000
Mortgage	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Equity	16,000	16,000	16,000	16,000	16,000	16,000	16,000
Monthly Mortgage Repayment	266	307	366	414	495	563	739
Monthly Operating Costs	157	157	157	157	157	157	157
Zero Profit Rent	423	464	523	571	652	720	896
Rent with Return on Equity(2)	483	544	630	704	812	907	1,150

NOTES:
1. Monthly mortgage payment is blended monthly payment for a 25-year amortization period.
2. Assuming the rate of return on equity is the same as the mortgage rate.

SOURCE: Derived from CMHC estimates founded in Shifting Foundations, the 1982 Annual Report of the City of Toronto Housing Department.

TABLE 3.8: THE EFFECT OF INFLATION AND RENT CONTROLS ON ECONOMIC RENTS

	First Year's Monthly Rent (1985 $)	
Case:	with controls	without controls
Low inflation: (4%)	$682-717	$627-666
High inflation: (12%)	$818-864	$649-703

Notes:
(1) Rents are for an average suite in a "moderate" suburban building in the Brampton area. The "average suite" may be considered to have two bedrooms. Based on cost data reported by Goring (Exhibit #124, Commission of Inquiry into Residential Tenancies). Capital cost per unit is $57,385 and operating cost is $232.50/month in the first year. Equity financing is 25% of the total.
(2) Economic rent is the average revenue per suite per month which is required to yield a return on equity from 2 to 4.25 percentage points higher than the mortgage rate. The return is calculated over 30 years. The real mortgage interest rate is 6.75% and the real return on equity is between 8.75 and 11.00%. The unit is assumed to be resold for $20,000 (at base year prices) at the end of 30 years. No adjustments have been made to reflect the value of capital cost allowances or the effect of income taxation.
(3) The "without controls" case is equivalent to rent regulation with statutory increase equal to the rate of inflation.
(4) The "with controls" case assumes statutory rate equal to 75% of the rate of inflation.
(5) The figures relate only to new construction and not to the economic rents on the existing stock. The principle, however, is applicable to investment in conservation and maintenance of the existing stock.

In the case of low inflation without controls, the economic rent on the average suite in Goring's example lies between $627 and $666 per month. Notice that if rent controls are expected to be effective, the economic rent rises to the rante $682-$717 per month. In the case of high inflation without controls, the economic rent rises slightly to between $649 and $703 per month. In the case of high inflation and controls, the economic rent is dramatically higher, between $818 and $864 per month.

This example points out that expectations about future developments have an important effect on the level of economic rents. In particular, it demonstrates the fact that the presence of binding rent regulation of the type currently in effect in Ontario actually raises the economic rent on new rental construction.

This subsection has stressed the difficulties of computing a meaningful figure for the economic rent on new rental construction. Nevertheless, it will be important to choose one range as indicative of the general level of economic rents at the present time. Accordingly, we suggest that in a world of low inflation and no rent regulation the economic rent on "moderate" two bedroom units in the Toronto suburbs would be in the range of $627 to $666 per month.

The Relation Between Economic and Market Rents

In Part A of this Chapter we stressed that there will be a tendency for the rental housing stock to shrink whenever the prevailing rent lies below the economic rent, while there will be a tendency for the stock to increase through new construction when the reverse is true. If rent regulation were to be removed, new construction will be stimulated only if the market clearing rent lies at or above the economic rent. In this subsection we attempt to gauge whether this conditions holds.

Some further indication of the relationship between economic and market rents is given by Clayton (1984, A-7). Using a model developed for CMHC but on different assumptions about interest rates, he estimates the economic rent per unit in a 20 unit townhouse project to be $750 while the "lower-end-of-the-market" (LEM) rent would be $450. Assuming with CMHC (1983,171) that the LEM rent is 88% of the true market rent, we have the true market rent of $511. The economic rent is 47% above this figure. Unfortunately it is not clear whether the true market rent in this example should be considered to correspond to controlled, uncontrolled or market clearing rents in Ontario.

The economic rents calculated in the Clayton example may be biased upwards if the construction costs have been inflated by government subsidy programs, a possibility discussed earlier. But in any case it is clear that at the present time economic rents are substantially above controlled rents in Ontario.

Clayton's work refers to 1983, when real interest rates were well above their 1985 levels. The evidence of Goring and Bassel, discussed above, suggests that the gap between market and economic rents is narrowing. As noted above, this economic rent on a two bedroom unit in the Brampton area would have been in the range of $627 to $666 in 1985. We need to compare this with an estimate of the market clearing rent on a similar unit.

Average rents on two bedroom apartments in Bramalea are reported bi-annually by CMHC. For October, 1985, the average rent on units subject to rent control was $485 per month. On uncontrolled units, it was $676 per month. On both types combined, the average rent was $597. Applying the Fallis and Smith conclusion that market rents lie about 10 per cent below uncontrolled rents, we obtain a market rent of $608 for the presently uncontrolled units. These units are not necessarily directly comparable to the units discussed by Mr. Goring and Mr. Bassel. On the other hand they may be up to 10 years old and thus unable to command quite as much rent as comparable new dwellings. On the other hand, there has been speculation that the dual system of rent control encouraged the construction of relatively luxurious apartments. If so, average rents on this stock would tend to be above the average rent to be expected on the "moderate" units discussed by Goring and Bassel. In the absence of further information, we ignore both these biases.

This discussion suggests that uncontrolled apartment units are already renting for what would be an economic rent in the absence of rent control and that the market clearing rent for new apartment units may be very close to the lower end of the range of economic rents. The potential application of rent control to these units, however, may have raised the economic rent above the present rent on uncontrolled units.

The evidence clearly shows that average rents on controlled buildings falls far short of the economic rent on comparable new units. While some allowance must be made for the older age of these units, we can safely conclude that there must be powerful incentives for owners of the present stock to convert it to alternative tenure or non-residential use.

On the basis of this section, it appears that the most likely configuration of market, controlled and economic rents is that appearing in Figure 3.2, that is, economic rents are probably in excess of market clearing rents for new construction in Ontario. The difference, however, may be quite small and there may be geographical areas or apartment types for which the relationship is reversed. It should be stressed that uncontrolled rents appear to be well within the range of economic rents for new construction, assuming a credible guarantee of no future rent control.

This condition arises largely from the high real interest rates which prevail in the Canadian economy. An implication is that decontrol of rents is not likely to stimulate large amounts of new residential construction for rental purposes until there is a decline in interest rates from the high levels observed in the past few years.

D. Summary

In this chapter we have considered a simple model of the operation of the rental housing market. In it, residential buildings are treated as capital assets which are combined with managerial skills and other assets to provide housing services. The central concept is that the rents collected over the life of a rental project must be sufficient to provide a competitive rate of return for landlords. Moreover, at ever point in time, rents must be sufficiently high to compensate landlords for both their operating costs and the foregone opportunity of selling their property and reinvesting the proceeds elsewhere. If this is not done, there will be continued pressure to reduce the rental housing stock by demolition and conversion to alternative uses.

Binding rent controls hold the actual rent paid below the level which would equate the supply of rental units to the demand. Under these circumstances, availability becomes a problem. If controls are removed, rents will rise to market clearing levels. This will reduce the demand for rental housing and increase the quantity supplied from the existing stock. New construction will only be induced, however, if the market clearing rent exceeds the economic rent. Sample calculations indicate that this has probably not been the case in the early 1980's, because high real interest rates have raised the economic rent.

These conclusions were reached using a simple theory of the rental housing market. Complications arising from the heterogeneous nature of housing and other market imperfections were not considered serious enough to alter the qualitative conclusions derived from the simple model.

CHAPTER IV

FUTURE PROBLEMS

The previous chapters have reviewed past and present problems in the Ontario rental housing market and have provided a theory or model of how the market operates. We now consider what problems are likely to remain significant and what other problems are likely to emerge over the next 15 years or so. The argument proceeds in three stages. Part A considers probable developments in the demand for rental housing. Part B considers supply developments. Finally, Part C divides the objectives of rental housing policy into those that are likely to be of major concern and those that will pose fewer problems.

A. Demand Developments

The demand for housing services is simply the quantity that people wish to buy, given their limited income and their need to purchase other goods as well. Although basic shelter is freely conceded to be a necessity, housing services are also economic goods and the demand for them is influenced by normal economic considerations. In particular, the position of the demand curve for rental housing (as shown in Figures 3.1 and 3.2) will depend upon average levels of income and the price of substitutes for rental housing, notably the costs of home-ownership. Given the position of the demand curve, the quantity of rental housing demanded depends upon the rent.

One should be careful to distinguish the demand for rental housing from the number of rental units occupied. The services provided by a rental unit vary with the size of the unit, quality of the furnishings, amenities and services in the building and location of the site, as well as other factors. Accordingly, when incomes rise (for example) the demand for rental housing services could increase without increasing the number of occupied dwelling units, simply because people wished to rent bigger and more luxurious apartments without changing the number of households.

Nevertheless, the number of rental households is a good proxy for the demand for rental housing because, given constant per capita income, prices, and social conventions (or "tastes"), the demand for housing services will be proportional to the number of households. The number of rental households is also measurable fairly easily, and thus provides a quantitative framework within which to discuss future developments. Consequently most forecasts of future rental housing demand begin with a forecast of increases in the number of rental households.

It must be clearly recognized that most forecasts of the number of households, rental or otherwise, are not intended to be best guesses about what the number of households will actually be. Instead they are forecasts of how many households would need to be formed if certain assumptions are to be confirmed. For example, one could forecast the number of households that would be required in the year 2000 to yield an average household size of three people. The forecast would simply be equal to the predicted population divided by three. The actual number of households would be quite different if for one reason or another the average household size in 2001 turned out to be 2.5. To avoid confusion, in this report forecasts which are derived mechanically from a specified set of assumptions will be termed projections.

To complement other studies of the demand for housing, an illustrative projection of rental housing requirements has been prepared for this study.[1] It is based on the following assumptions:

1. Population grows in Ontario according to the FF16HC projection of Statistics Canada.[2] This projection assumes constant fertility rates, high international immigration and an intermeditate position between past trends and the heavy return migration from Western Canada which occurred in the early 1980's.
2. Household headship rates by age class (the ratio of households with heads in a given age group to the total population in that group) are constant at the levels reported in the 1981 Census for Ontario.

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1. Foot (1985) has also prepared a projection of housing demand for the Inquiry. His results became available after this section was drafted. They should be consulted for further discussion and detail.
2. Statistics Canada, Demography Division (1983).

3. Renter household headship rates by age class (the ratio of rental households with heads in a given age group to the total population in that group) are also assumed constant and equal to their 1981 levels.
4. Within an age class, the proportion of households of any given family type is constant and equal to the corresponding proportion for Canada as a whole in 1981.
5. The incidence of core need among rental households of any family type or age class is constant and equal to the corresponding proportion for Canada, 1981.
6. The distribution of core housing needs by family type is independent of age.[3]

Only the highlights of the projection will be discussed here. The reader is reminded again that these projections are not considered the most probable developments in the housing market. Some observers (e.g. Clayton, 1984) consider that household headship rates are already declining from 1981 levels and will continue to do so at least for the next few years.

Table 4.1 shows the changes in population which are projected for the next 15 years. Since the adult population in the year 2001 has already been born, its main characteristics have already been determined. The major uncertainties lie in the level of interprovincial migration and, to a lesser extent, in the level of international migration.

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[3] This assumption is clearly contrary to fact. Unfortunately no reliable data are available on the joint distribution of core housing needs by age class and family type. The present assumption was made to provide a rough indicator of the composition of core rental housing needs.

According to this projection, the total population of Ontario will remain virtually constant at about 8.7 million over the period 1981-86. It is then expected to increase 12% to 9.7 million in 1991, by 5% to 10.3 million in 1996 and by another 4% to 10.7 million by 2001. This pattern masks important shifts in the age structure of the population as the post-war baby boomers move into middle age and are followed by the post-pill baby bust. In addition, the population over 65 will grow rapidly. Thus population in the 15-24 age group is expected to decline by 4% from 1981 to 1986, by 10% from 1986 to 1991, and a further 4% from 1991 to 1996, before finally growing by less than 3% from 1996 to 2001. This contrasts with the over 65 group, which will grow by 16% to 1986, by 18% to 1991, by 14% to 1996 and by 9% to 2001.

Tables 4.2-4.5 show how household formation would be affected by this changing age structure, assuming that headship rates remained constant. Between 1981 and 1986 growth in total households is projected to be 11% to 3.3 million. Growth would continue at the rate of 10% to 1991, 8% to 1996 and 6% to 2001.

TABLE 4.1: Population and Household Projections by Age Group;
Ontario, 1986 to 2001;

Age Group	Population				
	1981	1986	1991	1996	2001
0-4	593.0	468.9	654.6	638.0	603.6
5-9	617.3	470.8	645.3	678.6	663.1
10-14	676.3	437.7	627.2	665.2	698.8
15-19	808.9	693.6	648.8	643.2	681.2
20-24	789.7	839.8	728.1	685.4	681.5
25-29	734.8	826.2	881.1	776.4	737.8
30-34	721.5	758.4	853.7	906.1	803.8
35-49	581.2	734.8	775.1	869.2	919.2
40-44	492.0	586.9	741.6	782.4	876.1
45-49	468.0	493.1	588.5	741.8	783.6
50-54	468.9	465.6	490.6	584.1	735.5
55-59	448.9	462.3	459.3	482.1	573.5
60-64	356.5	435.9	449.4	445.2	467.2
65+	868.2	1007.3	1192.6	1355.2	1474.5
Total	8625.1	8681.3	9735.9	10252.9	10699.4

Broad Age Classes

Age Group	1981	1986	1991	1996	2001
0-15	1886.6	1377.4	1927.1	1981.8	1965.5
15-24	1598.6	1533.4	1376.9	1328.6	1362.7
25-34	1456.3	1584.6	1734.8	1682.5	1541.6
35-44	1073.2	1321.7	1516.7	1651.6	1795.3
45-54	936.9	958.7	1079.1	1325.9	1519.1
55-64	805.3	898.2	908.7	927.3	1040.7
65+	868.2	1007.3	1192.6	1355.2	1474.5
Total	8625.1	8681.3	9735.9	10252.9	10699.4

By Age of Household Head	Households				
	1981	1986	1991	1996	2001
15-24	208.2	199.7	179.3	173.0	177.5
25-34	700.4	737.5	662.2	639.0	655.4
35-44	576.3	709.7	814.4	886.9	964.0
45-54	515.0	527.0	593.2	728.8	835.0
55-64	450.1	502.0	507.9	518.3	581.7
65+	519.8	603.1	714.0	811.4	882.8
Total	2969.8	3279.0	3471.0	3757.4	4096.4

Sources: 1981 Population from Statistics Canada 1981 (92-901)
Population 1986-2001 from Statistics Canada, Components of Population Growth, 1984-2006, Projection FF16HC
1981 Households from Statistics Canada, 1981 Census (92-933)
Household projections based on constant headship rates by age class.

Most of the growth in households, however, is expected in the 35-54 year old category where homeownership is common. Assuming the current tenure split by age class remains constant, total rental households would grow by only 105 thousand or 10% from 1981-86, by 9% to 1991, by 5% to 1996, and by only 4% from 1996 to 2001.

The growth in renter households will be increasingly accounted for by a rise in older households. 30.7 thousand households in the total expected 1981-86 increase of 105.6 thousand would have heads over 65. The proportion rises to 40.8 out of 104, 35.8 out of 70.7, and 26.3 out of 56.8 in the next three periods. Renter households with older heads would grow by 16%, 18%, 14%, and 9% over the four Census periods.

Non-family households and households without children will account for most of the growth in total renter households throughout the four census periods, with shares of 62%, 62%, 66% and 70% respectively. Families with children account for virtually all the remaining growth. There were approximately 372 thousand renter households with children in 1981. This is expected to grow by 10% in 1981-86, by 9% in 1986-91, by 8% in 1991-96 and less than 4% in 1996-2001.

TABLE 4.2: ESTIMATED CHANGE IN NUMBER OF HOUSEHOLDS BY FAMILY TYPE, AGE, TENURE AND NEED; ONTARIO, 1981-86.

Age of Head	Family Type					Total	
	Non-Family	Couples		Single Parent	Multi-family	House-holds	Popu-lation
		without children	with children				
		(a)	Total Households				
under 15							-509.2
15-24	-3.8	-2.7	-1.4	-0.6	.0	-8.5	-65.2
25-34	13.2	12.4	31.1	4.5	0.5	61.7	128.3
35-44	15.9	10.4	91.6	14.2	1.5	133.5	248.5
45-54	1.7	1.8	7.0	1.3	0.2	12.0	21.8
55-64	12.4	18.6	16.1	4.0	0.8	51.9	92.9
65+	38.4	33.7	6.5	4.0	0.7	83.3	139.1
Total	77.8	74.3	150.9	27.4	3.7	333.8	56.2
		(b)	Total Renter Households				
under 15							-509.2
15-24	-3.6	-2.1	-0.9	-0.5	.0	-7.1	-65.2
25-34	11.1	6.4	9.3	3.4	0.2	30.3	128.3
35-44	10.6	3.4	14.5	7.6	0.2	36.5	248.5
45-54	0.9	0.4	0.8	0.5	.0	2.7	21.8
55-64	6.0	3.4	1.9	1.3	0.1	12.6	92.9
65+	20.2	8.3	1.0	1.1	0.1	30.7	139.1
Total	45.3	19.8	26.6	13.3	0.5	105.6	56.2
		(c)	Renter Households in Core Need				
under 15							-509.2
15-24	-0.9	-0.1	-0.2	-0.3	.0	-1.5	-65.2
25-34	2.2	0.4	0.4	0.7	.0	3.7	128.3
35-44	3.0	0.5	0.5	1.0	.0	5.0	248.5
45-54	0.3	.0	.0	0.1	.0	0.4	21.8
55-64	1.5	0.2	0.3	0.5	.0	2.5	92.9
65+	5.8	1.0	1.0	1.9	.0	9.7	139.1
Total	11.8	2.0	2.0	3.9	0.1	19.7	56.2

Source: Calculated from Table 4.1 by applying constant headship and renter headship ratios to estimated population by age class, and applying Canada wide incidence of core need by age and family type to estimated renter households. When applied to 1981, this method leads to row totals sightly different from Census data.

TABLE 4.3: ESTIMATED CHANGE IN NUMBER OF HOUSEHOLDS BY FAMILY TYPE, AGE, TENURE AND NEED; ONTARIO, 1986-91.

	Family Type					Total	
		Couples					
Age of Head	Non-Family	without children	with children	Single Parent	Multi-family	Households	Population
		(a) Total Households					
under 15							549.7
15-24	-9.1	-6.4	-3.5	-1.4	-0.1	-20.4	-156.5
25-34	15.5	14.5	36.4	5.2	0.6	72.2	150.2
35-44	12.5	8.2	71.9	11.1	1.2	104.7	195
45-54	9.3	9.9	38.9	7.0	1.1	66.2	120.4
55-64	1.4	2.1	1.8	0.5	0.1	5.9	10.5
65+	51.1	44.9	8.7	5.3	1.0	110.9	185.3
Total	80.7	73.2	154.2	27.8	3.8	339.6	1054.6
		(b) Total Renter Households					
under 15							549.7
15-24	-8.6	-5.0	-2.2	-1.2	-0.1	-17.1	-156.5
25-34	13.0	7.5	10.9	3.9	0.2	35.5	150.2
35-44	8.3	2.7	11.4	6.0	0.2	28.6	195.0
45-54	5.2	2.1	4.5	2.7	0.1	14.7	120.4
55-64	0.7	0.4	0.2	0.1	.0	1.4	10.5
65+	27.0	11.0	1.3	1.4	0.1	40.8	185.3
Total	45.6	18.8	26.1	12.9	0.5	104.0	1054.6
		(c) Renter Households in Core Need					
under 15							549.7
15-24	-2.1	-0.4	-0.4	-0.7	.0	-3.6	-156.5
25-34	2.6	0.4	0.4	0.9	.0	4.3	150.2
35-44	2.3	0.4	0.4	0.8	.0	3.9	195.0
45-54	1.5	0.2	0.3	0.5	.0	2.5	120.4
55-64	0.2	.0	.0	0.1	.0	0.3	10.5
65+	7.7	1.3	1.3	2.5	.0	12.9	185.3
Total	12.1	2.0	2.1	4.0	0.1	20.3	1054.6

Source: Calculated from Table 4.2 by applying constant headship and renter headship ratios to estimated population by age class, and applying Canada wide incidence of core need by age and family type to estimated renter households. When applied to 1981, this method leads to row totals sightly different from Census data.

TABLE 4.4: ESTIMATED CHANGE IN NUMBER OF HOUSEHOLDS BY FAMILY TYPE, AGE, TENURE AND NEED, ONTARIO, 1991-96

Age of Head	Family Type					Total	
	Non-Family	Couples		Single Parent	Multi-family	House-holds	Popu-lation
		without children	with children				
		(a) Total Households					
under 15							54.7
15-24	-2.8	-2.0	-1.1	-0.4	.0	-6.3	-48.3
25-34	-5.4	-5.1	-12.7	-1.8	-0.2	-25.2	-52.3
35-44	8.6	5.7	49.7	7.7	0.8	72.4	134.9
45-54	19.0	20.3	79.8	14.4	2.2	135.7	246.8
55-64	2.5	3.7	3.2	0.8	0.2	10.4	18.6
65+	44.8	39.4	7.6	4.7	0.8	97.4	162.6
Total	66.7	62.0	126.6	25.4	3.7	284.4	517.0
		(b) Total Renter Households					
under 15							54.7
15-24	-2.6	-1.5	-0.7	-0.4	.0	-5.3	-48.3
25-34	-4.5	-2.6	-3.8	-1.4	-0.1	-12.3	-52.3
35-44	5.8	1.9	7.9	4.1	0.1	19.8	134.9
45-54	10.6	4.3	9.3	5.6	0.3	30.1	246.8
55-64	1.2	0.7	0.4	0.3	.0	2.5	18.6
65+	23.7	9.7	1.2	1.2	0.1	35.8	162.6
Total	34.0	12.4	14.3	9.5	0.4	70.7	517.0
		(c) Renter Households in Core Need					
under 15							54.7
15-24	-0.7	-0.1	-0.1	-0.2	.0	-1.1	-48.3
25-34	-0.9	-0.2	-0.2	-0.3	.0	-1.5	-52.3
35-44	1.6	0.3	0.3	0.5	.0	2.7	134.9
45-54	3.0	0.5	0.5	1.0	.0	5.1	246.8
55-64	0.3	.0	0.1	0.1	.0	0.5	18.6
65+	6.8	1.1	1.2	2.2	.0	11.3	162.6
Total	10.1	1.7	1.7	3.4	.0	17.0	517.0

Source: Calculated from Table 4.1 by applying constant headship and renter headship ratios to estimated population by age class, and applying Canada wide incidence of core need by age and family type to estimated renter households. When applied to 1981, this method leads to row totals sightly different from Census data.

TABLE 4.5: ESTIMATED CHANGE IN NUMBER OF HOUSEHOLDS BY FAMILY TYPE, AGE, TENURE AND NEED, ONTARIO; 1996-2001.

	Family Type					Total	
	Non-Family	Couples without children	Couples with children	Single Parent	Multi-family	House-holds	Popu-lation
Age of Head							
		(a) Total Households					
under 15							-16.3
15-24	2.0	1.4	0.8	0.3	.0	4.4	34.1
25-34	-14.5	-13.6	-34.1	-4.9	-0.6	-67.8	-140.9
35-44	9.2	6.0	53.0	8.2	0.9	77.2	143.7
45-54	14.9	15.9	62.4	11.3	1.7	106.2	193.2
55-64	15.1	22.7	19.7	4.9	1.0	63.4	113.4
65+	32.9	28.9	5.6	3.4	0.6	71.4	119.3
Total	59.5	61.3	107.3	23.3	3.6	254.8	446.5
		(b) Total Renter Households					
under 15							-16.3
15-24	1.9	1.1	0.5	0.3	.0	3.7	34.1
25-34	-12.2	-7.0	-10.2	-3.7	-0.2	-33.3	-140.9
35-44	6.1	2.0	8.4	4.4	0.1	21.1	143.7
45-54	8.3	3.4	7.3	4.4	0.2	23.6	193.2
55-64	7.3	4.1	2.3	1.5	0.1	15.4	113.4
65+	17.4	7.1	0.9	0.9	0.1	26.3	119.3
Total	28.8	10.7	9.1	7.8	0.3	56.8	446.5
		(c) Renter Households in Core Need					
under 15							-16.3
15-24	0.5	0.1	0.1	0.2	.0	0.8	34.1
25-34	-2.4	-0.4	-0.4	-0.8	.0	-4.1	-140.9
35-44	1.7	0.3	0.3	0.6	.0	2.9	143.7
45-54	2.4	0.4	0.4	0.8	.0	4.0	193.2
55-64	1.8	0.3	0.3	0.6	.0	3.0	113.4
65+	5.0	0.8	0.8	1.6	.0	8.3	119.3
Total	8.9	1.5	1.5	2.9	.0	14.9	446.5

Source: Calculated from Table 4.1 by applying constant headship and renter headship ratios to estimated population by age class, and applying Canada wide incidence of core need by age and family type to estimated renter households. When applied to 1981, this method leads to row totals sightly different from Census data.

The number of households in core housing need is expected to grow by about 20 thousand each Census period to 1991, on the assumption that the incidence of core need by family type and age class remains constant. This represents a growth rate of about 10%. About 30% of those in core need were elderly in 1981; this rises to almost 38% by 2001. Families with children remain at about 30% of the core need group throughout.

On the basis of these projections, one would expect continuing growth in the demand for rental housing at a rate of about 2% per year for the period 1981 to 1991 and at somewhat lower rates thereafter. The most significant change will be a growth in the number of households headed by older people. These will be growing by 4% to 5% per annum for the rest of the century.

B. Supply Developments

Given the position of the demand curve for housing services, developments in the rental housing market depend upon the position and elasticity of the short run supply curve, on the relationship between prevailing rents and the economic rent, and the speed with which the short run supply curve can adjust in response to any differences between the prevailing rent and the economic rent. But all of these factors depend heavily on the rental housing policies adopted by the various levels of government. In the past year, both the federal and provincial governments have announced changes in housing policy which may radically affect the rental housing market in Ontario. In this section we first consider the environment under which the industry will be operating, as far as that can be determined by announced government policies. We then consider the effect of current developments on the relationship between prevailing rents and economic rents. Finally we consider developments which may affect the position and speed of adjustment of the short run supply curve.

1. Announced Developments in Public Policy

At the time of writing, both the federal government and the government of Ontario were considering major changes to their housing policies. Moreover, the recommendations of the present Inquiry, should they be adopted, will profoundly influence developments in the rental market. Nevertheless, policy changes have been announced at both the federal and provincial levels which, if implemented, will have important effects.

At the national level, the federal and provincial ministers responsible for housing agreed, in July, 1985, on a number of principles that should guide public policies affecting "market" housing. Most importantly they recognized that "the private sector should be viewed as the primary supplier of housing and that public programs should complement and facilitate the operation of the private sector". In addition the ministers agreed that housing policies should be "consistent with requirements for fiscal responsibility".[4] This statement suggests that policies which imply progressively increasing public involvement in the supply of rental housing are inconsistent with the announced strategies of the senior levels of government. In addition, the document released by the ministers condemns "market stimulus" programs which distort the private housing market. This indicates that many of the supply side subsidy programs which are discussed below (in Chapter 5 of this study) are unlikely to receive continued support.

At the federal level, the Minister responsible for the Canada Mortgage and Housing Corporation has outlined current policies in a number of speeches. Most importantly, the Minister has categorically rejected a federal shelter allowance program on the grounds that the cost is uncertain, that it "would not add to the stock of housing available to low income houses in some areas and that it would not deal with the housing problems faced by special need groups such as the elderly and the handicapped".[5] The Minister has also indicated agreement with the following propositions:

i. that households unable to afford suitable, adequate shelter in the private market should receive assistance,

ii. that non-profit and co-operative housing should be continued as a means of aiding those with affordability problems,

iii. that social housing programs should consist of a package including non-profit housing, rent supplement and renovation strategies,

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[4] Federal-Provincial Conference of Ministers of Housing, "Summary Report of the Federal-Provincial Market Housing Subcommittee", Calgary, Alta., July 4, 1985.

[5] McKnight (1985, 2).

iv. that the federal rent to income scale should not be increased to 30 or 35 percent, and

v. that there should be co-ordination of federal and provincial policies.[6]

In addition to these general principles, it is known that the federal government is presently negotiating with the individual provincial governments concerning methods for turning the delivery of virtually all federal social housing programs over to the provinces. The exact nature of the agreements has not yet been determined, but the federal government has committed itself to continued access to federal programs by all groups across the country.

At the provincial level, the government has undertaken a number of commitments which seem to be somewhat in conflict with the principles just discussed. Most prominent among these are commitments to reduce the statutory rate of increase under the rent review program to 4%, the extension of rent review to buildings constructed after 1975 and to units renting for more than $750 per month, and the implementation of a rent registry. These commitments have not yet been implemented through legislation, but the government has consistently affirmed its intentions to do so.

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[6] Ibid, p. 10. Several other propositions are also affirmed in his text.

2. Economic and Prevailing Rents

In this subsection we first explore the factors which determine the level of economic rents and then discuss developments which may affect the relationship of prevailing rents to the economic rents.

Economic Rents

As explained previously, the economic rent is the rent which yields a landlord a rate of return equal to that he could obtain by investing his capital elsewhere. There is no simple way of calculating the economic rent on the basis of a single year's costs, since the relationship between revenue and costs typically changes over the life of a building. Consequently the economic rent can only be calculated by making explicit assumptions about the rate of change in rents, costs and resale values over the entire period during which a landlord owns a rental building.

In order to investigate the effects of possible future developments, a computer based model was developed by the author to compute the economic rent on alternative assumptions about the nature of rent review, the rate of inflation, and the resale value of the property. This model captures the fundamental properties of the present system of rent regulation in Ontario, although it does not account for all the details. Briefly, the computer program assumes an initial level for the rent and operating costs of a new rental unit. Next it calculates operating costs and mortgage payments for a thirty year period and the rental increases which would be permitted under the statutory increase or cost pass-through provisions of Ontario's rent review system. It then assumes that the unit is sold for a specified salvage value and computes the rate of return on the owner's equity for the entire investment cycle. Finally, the program adjusts the base year rent and recalculates the rate of return until it equals a level specified by the user.

The results of these computations are presented in Table 4.6. Purely for illustrative purposes, it was assumed that the rental unit had a capital cost of $64,000 and that operating costs were $200 per month, and that the amortization period was 30 years. Most of the cases assume that the resale value of the unit is $20,000, expressed in today's prices.

In the base case it was assumed that the mortgage rate is 13%, operating costs and price inflation rise continuously at 4% per annum and the statutory rate of increase permitted under the rent review regulations is equal to the rate of inflation. Because the rate of increase in both statutory rents and costs is equal to the rate of inflation, the cost pass-through provisions do not come into effect. Table 4.6 shows that in this case the landlord must receive a base year rent of $592 per month to earn a 10% return on his equity investment.

TABLE 4.6: SENSITIVITY TESTS ON ECONOMIC RENT. (1)

Case	Mortgage Rate	Inflation Rate	Statutory Rate	Return on Equity	Salvage Value (k$)	Economic Rent	Negative Cash Flow (years)
Base Case	13	4	4	10	20	592	11
Low Interest	11	4	4	10	20	534	11
Low Inflation	11	2	2	8	20	602	13
Higher Return	13	4	4	13	20	626	9
Low Statutory Inc.	13	4	3	10	20	653	12
High Inflation	15	6	4	10	20	681	12
High Infl. and ROI	15	6	4	12	20	706	10
High Statutory Inc	15	6	6	12	20	585	10
High Salvage Value	13	4	4	10	64	542	15
High Equity Return/ Low Int. Rates	11	4	4	13	64	535	11

Note: See Appendix for detailed annual estimates over a 30 year period.

Source: Special Calculations for a hypothetical rental unit with capital cost of $64,000, equity of $10,000 and mortgage of $64,000 amortized over a 30 year period.
Salvage value is the expected selling value of the unit and land after 30 years, expressed at base year prices.
Salvage value and operating costs are escalated at the rate of inflation.

Because rents are assumed to rise at the rate of inflation while mortgage payments are constant, the landlord experiences a number of years in which rental revenues fall short of costs. In the base case this period of negative cash flow lasts for 11 years.

A key factor in the level of economic rents is the rate of mortgage interest. If the rate of mortgage interest were to decline by two percentage points to 11% while all the other conditions were unchanged, the economic rent would fall 10% to $534 per month.

Although it is common to attribute high rents to inflation, the computations indicated that, by itself, anticipated inflation can actually lower the rents. Table 4.6 shows that if mortgage rates, inflation rates, statutory rates and required return on equity all decline by two percentage points the economic rent actually rises to $602 per month. This result is not universal, as shown by the results of Table 3.8 above.

In all of these cases there is a prolonged period of negative cash flow. By assuming a required rate of return on equity equal to 10%, lower than the mortgage rate, we are assuming that the landlord has a source of low cost funds which he is willing to invest in the rental unit rather that at the going rate of return. This is a questionable assumption. The "Higher Return" case in Table 4.6 shows that requiring a rate of return on equity equal to the rate of mortgage interest leads to a 5% rise in the economic rent to $626.

The economic rent is severely affected when the statutory increase is less than the rate of inflation. Table 4.6 shows that if the statutory increase is reduced to 3% while inflation remains at 4%, the economic rent rises by 10% to $653. Similarly if the statutory increase remains at 4% while the rate of inflation and mortgage interest rates rise by two percentage points, the economic rent rises 15% to $681 per month. If the required rate of return on equity also rises by 2 percentage points the result is even more dramatic: the economic rent rises by 19% to $706 per month.

It is difficult to overestimate the importance of allowing the statutory increase to at least equal the rate of inflation. If, in the case just discussed, the statutory increase is also allowed to rise to 6%, the economic rent is actually lower than in the base case: it falls by 2% to $583 per month.

Finally, resale value is certainly important in reducing economic rents. Table 4.6 shows that if the dwelling unit appreciates precisely at the rate of inflation over the 30 years, the economic rent declines by 9% to $542. This case must be interpreted with caution, however. Notice that it implies a negative cash flow period of 15 years. It seems highly unlikely that an investor would continue to supply funds for 15 years to earn a return 3 percentage points less than the rate of mortgage interest. The final case in Table 4.6 reports the contrary case in which a return on equity 2 percentage points higher than the rate of interest is required to induce investment. In this case, even with a high resale value, the economic rent is 5% higher than the base case.

To summarize these results, the most important factors affecting the level of economic rents are the real interest rate (that is, the difference between the mortgage rate and the rate of inflation), the expectation of capital gains or losses on resale of the rental unit, and the relationship of the statutory increase to the rate of inflation.

It is difficult to forecast the development of these critical variables. Real mortgage interest rates of 9%, such as we are presently experiencing, are extraordinarily high by historical standards. Throughout the 1950's and 1960's nominal mortgage rates were frequently in the neighbourhood of 5% and despite the much higher nominal rates experienced in the 1970's, even higher rates of inflation meant that real interest rates were still very low. It is only since about 1982 that real interest rates have been so high as to severely affect economic rents. Although there is no agreement among economic observers, it is the opinion of the author that in the coming decades, real interest rates are not likely to remain as high as they are presently. This should provide some downward pressure on economic rents.

The expectation of capital gains also reduces economic rents. The capital value of an older rental building depends on the net revenues it is earning, if it is to be retained in residential use, or upon the value of the land it occupies if it is not. Consequently, if landlords expect that rental revenues will be restricted and that they will experience difficulty in converting older buildings to non-residential use, they will not expect very high capital gains from the resale of their buildings. Thus one's forecast of future capital gains in rental buildings is heavily dependent on one's predictions about future government policies towards rent review and conversion.

Finally, the relationship between the statutory increase and the rate of inflation under rent review is very important in determing the level of the economic rent. In the past, the statutory increase has averaged about 75% of the inflation rate (Thom, 1984). The Premier of Ontario has recently announced that the statutory increase will be 4% effective August, 1985, and that new buildings will be brought under rent review. If the government were to give a firm commitment that the statutory increase would always equal the rate of inflation, this provision would not seriously affect the economic rent on new buildings. If, however, landlords expect that the statutory rate will once again be reduced below the rate of inflation, the required economic rent will be increased.

Related to the problems discussed above is that of uncertainty. The examples developed in Table 4.6 have demonstrated that inflation does not affect the economic rent as severely when the statutory increase is immediately adjusted to equal it. Recent economic history, however, has shown everyone that severe fluctuations in the rate of inflation are not uncommon and that changes in the statutory rate have lagged significantly behind changes in inflation. The returns to be earned by investing in rental buildings are thereby made uncertain. When returns are uncertain it is usually necessary to offer a higher average or expected rate of return in order to induce investors to risk their capital. It seems certain, therefore, that until the provincial government clarifies its policy in this area economic rents will be adversely affected by uncertainty.

In summary, economic rents have been high in the recent past because of high real interest rates. Economic rents may also have been increased by the difficulty of converting rental property to other uses, by the expectation that allowed rent increases on the controlled stock will be less than the rate of inflation, and by the uncertainty imposed by government policy.

Prevailing Rents

The announced intention of the provincial government to extend rent review to all rental buildings and to implement a rent registry may have profound effects on the relation between prevailing rents and economic rents. The most important factor is the role of a rent registry in making rent review more effective. It is the general impression of many observers that large numbers of rental dwellings which are nominally subject to rent review have been subject to rent increases much beyond the legal limit because there is no effective mechanism for new tenants to verify that rents have not been increased beyond the legal amount when a tenancy is ended. Evidence on the importance of this effect is provided by Mascall (1985), who shows that the owners of a large fraction of the rental units available to those seeking an apartment claim to be exempt from rent control, even when the age of the building and the level of rent clearly indicate otherwise. Moreover in a substantial number of cases, the asking price for units which had been subject to rent control was considerably in excess of the legal rent.

If the provincial government introduces a rent registry, it will be much more difficult for small landlords to evade rent controls. This in turn means that their rental revenues will fall even more below the level required to compensate them for the full cost of supplying rental accommodation.

3. The Short Run Supply Curve

We have seen that it may well be that, at present, economic rents are in excess of those which would clear the market under a more relaxed version of rent review. The analysis of Chapter III showed that under such circumstances there is a tendency for landlords to attempt to withdraw their capital from the rental housing market. This will lead to attempts to convert rental housing to alternative forms of tenure or to non-residential use.

Empirical evidence that this is occurring is provided by recent studies emphasizing the degree to which the existing rental stock is "in jeopardy". For example, Ekos (1985, 18) estimates, on the basis of a survey of landlords of low rise buildings, that up to 30% of the existing low rise rental stock may be withdrawn from its present use over the next 10 years.

The speed with which this can be done depends on whether municipal by-laws allow conversion. Many municipalities have attempted to prevent demolition and conversion of the older rental stock.[7] A case in point is that of the Axelrod buildings described by Stanbury and Vertinsky (1985, v.1, 6-39). In this case, City Council systematically refused to grant a demolition permit and had to be forced to obey a court order by considerable fines. If city by-laws preventing demolition and conversion are struck down more generally, the rental housing stock may be expected to decline rapidly so long as rents are below the full economic rent determined by land values and conversion opportunities.

In terms of Figure 3.2, the short run supply curve of rental housing may be expected to shift rapidly to the left if controls on demolition and conversion are relaxed. A countervailing effect is the provision of new rental housing by public authorities. It was shown in Chapter II that a substantial fraction of the additions to the Ontario rental stock since 1976 have been in the form of socially assisted housing. This has tended to keep vacancy rates from falling even more than they have. However, there are indications that federal funding for socially assisted housing may be reduced in the future. Newspaper reports indicate that the Federal government intends to transfer delivery of housing programs to the provinces on an individually negotiated basis. It is likely that the federal share of funding will be reduced and that there will be pressures to end rent control (Globe, 15 June, 1985, and Star, 16 June, 1985).

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[7] For example, the City of Ottawa Condominium Conversion Policy (passed October 15, 1980) requires that applications for conversion of rental properties to condominium not be approved "until such time as the vacancy rate...exceeds 3% within the City of Ottawa overall...or exceeds 4% within privately initiated structures within a specific zone of the City..." (s.3.i).

If federal and provincial funding for socially assisted housing is reduced or redirected to the purchase of existing stock, public additions to the rental housing stock will be reduced, and the short run supply curve of rental housing will shift more rapidly to the left. This will tend to accentuate availability problems if the present system of rent review remains in place. If rents are allowed to rise, the reduction in the rental housing stock would be slowed down or reversed, but affordability problems would be worsened.

C. Probable Consequences of the Status Quo

In this section we attempt to identify those rental housing problems which will be most severe in Ontario over the coming 15 years or so on the assumption that present policies, including the rent review program, continue unchanged. On the basis of the previous discussion it is clear that no one can make a confident prediction about what will happen in the Ontario rental market. One's predictions depend heavily upon the factors already discussed in this chapter. Nevertheless, a tentative attempt should be made, if only to provide a reference point for different opinions.

In the author's opinion, it is probable that real interest rates will decline slightly over the next 5 years. If the statutory rent guideline remains equal to the rate of inflation and rental apartments neither rise nor fall in real capital value over their lifetime, the economic rent on a $57,000 apartment unit would be about $650 per month. This is about 8% higher than the average rent for two bedroom apartments in suburban Toronto (see Chapter 3C above). It should be recognized that this comparison is fraught with difficulties, first because the capital and operating costs of a new unit could vary widely according to the quality of the unit and the accompanying services and secondly because the average rent reported by CMHC covers all buildings, the older of which would command lower rents than a new building.

If rent review remains in place in more or less its present form, there will be little incentive for the private sector to construct new rental dwellings. This is partly because the economic rent exceeds the prevailing level of rents under rent control even under relatively optimistic assumptions, and partly because the uncertainties associated with rent review regulations (particularly the relation of statutory guideline increases to inflation) significantly increase the required economic rent on new units.

This does not imply that new rental construction would automatically occur if rent review restrictions were relaxed. The consequences of relaxing rent regulation are discussed in Chapter 5A, below.

In previous sections it has been suggested that the rent received by the owners of the existing rental stock falls short of the full cost of providing the accommodation, and that this situation will be worsened if the province proceeds with its plan for a rent registry. This suggests that there is likely to be greatly increased pressure from landlords who wish to convert or demolish their buildings. Consequently, under the status quo, we may expect a considerable and rapid loss of the existing rental housing stock, especially that portion of the stock which can be readily converted to other uses. The extent of this loss will depend on the efficacy of muncipal regulations designed to stem it.

The major sources of new socially assisted rental housing in Ontario are the non-profit and co-operative housing programs. Table 2.8 indicated that over the period 1982-84 these programs added about 8,000 units annually to the rental stock. As mentioned earlier, the future of these programs is in doubt, but even if the present flow continues, it would not be adequate to meet the projected increase of about 20,000 rental units per year.

As a result of these developments, availability of rental housing will continue to pose a serious problem. Vacancy rates will continue to be extremely low. The availability problem will be most serious for those who cannot afford the alternative of home ownership. As those who can afford condominium or freehold tenure leave the rental market, a larger fraction of the remaining renters will be drawn from the very low income groups. Accordingly, the fraction of tenants in core housing need will tend to rise, although this will be an artifact of policies which remove higher income groups from the rental market rather than as a consequence of rising real rents.

On the assumption that current policies continue, the general level of rents on apartments subject to rent review may be expected to stay constant or decline relative to the rate of inflation. The only exceptions would be due to a marked drop in inflation from its current level of 4% or a marked rise in interest rates. The former would allow real rents to increase during the lag before the statutory increase is adjusted and the latter would allow many landlords to obtain rent increases due to the pass through provisions of the current system.

Relatively constant real rents imply that affordability problems are not likely to become more serious for the population in general, unless economic growth falters so much that the average level of per capita income actually declines. As noted earlier, the observed incidence of affordability problems among renters may increase due to their increasing share of the renter population.

Given low rents and the perceived strong position of tenants under the Landlord and Tenant Act there will be very little incentive for individual property owners to convert their holdings to forms suitable for older tenants, who are expected to form an increasing proportion of the renter population. Availability problems are likely to be particularly severe for this class of renter, especially those within it who do not have capital funds available to finance a condominium purchase.

Still on the assumption of current policies, the inequities noted in Chapter II are likely to continue. Increasing shortages are likely to increase the opportunities for sub-lessors and unscrupulous landlords to demand key money. As noted earlier, the poor, newly arrived, and visibly different are likely to suffer most in times of very low vacancy rates.

If, as announced, rent regulation is extended to buildings with rents over $750 and to newly constructed buildings, there will be less of an incentive to build luxurious accommodation which can escape rent control. This may moderate some excessive construction costs. Nevertheless, much of the increase in the rental stock will be in the form of socially assisted housing. Since there is evidence that building costs in these developments are high, the objective of housing at least cost is unlikely to be fulfilled.

The continuation of present policies will exacerbate the conflict between public expenditure on housing and on other social goals. The current subsidy on non-profit and co-operative housing units is about $50,000 per unit. To supply 20,000 units annually would cost about one billion dollars annually. In a time of continued efforts to reduce government deficits and of restricted expenditure on education, health, scientific research and environmental improvement, the expenditure of such a sum to subsidize rental housing without accurately targetting on those groups most in need seems to lack respect for other social goals.

Some other objectives of rental housing are less likely to pose difficulties in the future. Current public policies appear to be working well in promoting social diversity within socially assisted housing and within neighbourhoods, although some have expressed concern that the current system of charging low end of the market rents for the units which are not income tested has excluded tenants with moderate incomes and is in danger of creating two classes of tenant in non-profit buildings.

Rent gouging is not likely to be a problem under current policies, unless a new round of rapid inflation occurs. Such a burst of inflation would lead to higher interest rates which would eventually be passed on to tenants under rent review. Such inflation would also cause inequities between those landlord who have high mortgages and those who don't.

Security of tenure (from unreasonable eviction) does not seem to be a problem under current policies and will not be a problem in the future. However, the continued pressure to redevelop older properties will continue to lead to cases of perceived injustice, when tenants of long standing will be forced to vacate older buildings. This may be called a problem of security of tenure, but it poses problems primarily because displaced tenants cannot find similar accommodation at similar rents: this is really a problem of availabilility and affordability.

D. Summary

In this chapter we have attempted to identify those objectives which will be particularly difficult to reach in the next 15 years. We considered first probable developments in the demand for rental housing. On the basis of projections prepared for this study and other similar studies, we expect a continued growth in the demand for rental housing at a rate of about 2 percent per year for the period 1986-91 and at somewhat lower rates thereafter. The most significant demographic change will be a growth in the number of households headed by older people. If present trends continue, the number of households in core housing need will grow by about 4,000 per year to 1991.

On the supply side, we attempted to identify trends in public policy which may affect future developments. At the national level, statements by the federal government and the federal-provincial conference of housing ministers indicate an increased reliance on the private sector for the supply of housing and a rejection of both shelter allowances and supply side subsidies as devices for solving housing problems. At the provincial level, a number of developments have occured which reduce the probability that the private sector can supply the needed rental housing. The most important of these developments are the extension of rent review to all rental buildings and the plan to implement a rent registry.

CHAPTER V

PUBLIC POLICIES

In Chapter I of this study we noted that one cannot normally achieve several objectives with a single instrument. A system of rent review, no matter how well designed, is unlikely to achieve as many of Ontario's rental housing objectives when acting alone as it would when combined with other appropriate housing policies. In this chapter we consider a number of policies which could be pursued, in concert with a system of rent regulation, to improve the performance of the rental housing market in Ontario.

A number of other studies prepared for the Inquiry have focussed on such complementary policies. In particular, Chant (1985) has examined a number of possible policies and their effects on a list of social objectives similar to the one employed in this study. His work will be relied upon extensively in this Chapter. In addition, Quirin (1985) has provided the Inquiry with a detailed study of rate of return regulation and the methods by which it might be used in the rental housing market. His work will also be drawn upon in this Chapter.

Since the details of most public policies have been discussed elsewhere, our interest in this chapter lies primarily on how they would affect the rental policy objectives we have chosen. These effects will differ according to the nature of the scheme of rent regulation in place. Accordingly the Chapter first considers several possible modifications of the current system of rent regulation. It then classifies policies complementary to rent review under four headings: (1) policies which directly affect the demand for rental housing (e.g. shelter allowances), (2) policies which affect the private sector's willingness to supply rental housing (e.g. subsidies), (3) policies which supply rental housing directly (e.g. the non-profit housing program) and finally (4) policies which alter the institutional structure in which the rental market operates. Each of these groups of policies affect rental housing policy objectives in somewhat different way. We will attempt to identify the direction and magnitude of the effect of each type of policy on the main policy objectives. In Chapter VI we will consider which combinations of policies might constitute an appropriate overall strategy for the rental market.

A. Alternative Forms of Rent Review

The system of rent regulation in Ontario is well documented in the first report of the Inquiry (Thom, 1984). Briefly, it provides that the annual increase in rent charged for any dwelling unit may not exceed a specified percentage of the current rent without the permission of the Residential Tenancies Commission (RTC). This amount was termed the statutory increase in the Inquiry's first report.

Upon application by the landlord, the rents in an entire building may be reviewed by the RTC. The RTC may grant a rent increase equal to the projected change in certain allowable costs. This is termed the cost pass-through provision. There is no ceiling on the rate at which the cost pass-through provisions can cause the rent to increase. The system originally applied only to rental dwellings built before 1976 which had rents below a specified maximum. The Premier of Ontario has announced, however, that legislation will be introduced in the fall of 1985 to extend the system to all private rental dwellings in the Province. This legislation will be retroactive to August 1, 1985.

The key elements in determining the rent increase are the rate of statutory increase (otherwise known as the guideline rate) and the nature of the costs which are allowed under the pass-through provisions. The current statutory rate is 6% per annum; the Premier has announce that this is to be reduced to 4%. The system allows for the pass through of all routine maintenance costs and administrative expenses. Major improvements may be capitalized and the rents raised sufficiently to amortize them. Increases in interest payments ("financing costs") may be passed through subject to certain limitations. The one cost which cannot be passed through is the loss of income on the owner's equity investment in his property.

Four fundamental choices with respect to rent review can be distinguished. The first is to leave the present system in place (the "status quo"). The remaining three are to modify the formulae used under the present system to allow a more sensitive and predictable relationship between statutory increases and inflation, to modify the system so as to allow for a "fair rate of return" on the owner's equity capital, or convert the system to one of arbitration. In an arbitration system the rent review commission considers only those rent increases which have been appealed by tenants and rejects those which are judged excessively high.

All three of these alternatives act so as to reduce the difference between regulated and market rents. This report will refer to them collectively as methods of liberalizing rent regulation.

The probable effects of the status quo were discussed in Chapter IV. Briefly, it was concluded that the current system would lead to continued problems of availability of rental housing for all and of affordability for low income renters. Serious inequities will occur in the treatment of sitting and newly arrived tenants, construction costs of publicly supplied housing will be greater than necessary and the funding requirements for new rental housing will seriously hamper the achievement of other social goals. These effects will be more severe, the more effective is the system in preventing average rents from rising at or above the rate of inflation. Thus the imposition of a rent registry to reduce the ability of landlords to raise rents between tenants will exacerbate all of the problems previously discussed.

1. Changing the Formula

The preceding discussion assumes that the statutory rent increase under the present system continues to be set significantly below the rate of inflation. The negative effects of the present system would be mitigated if the statutory increase were held consistently above the rate of inflation. This would gradually allow controlled rents to approach market clearing levels. Once market clearing levels were reached, continued increases in the rent permitted under the statutory guideline would not necessarily be sustainable in the rental market. Once this stage had been reached, the system could easily be converted to one of rent arbitration, as discussed below.

For purposes of discussion, let us consider a liberalized formula designed simply to avoid rapid increases in rent which might pose difficult problems of adjustment for some families. For example the rule might limit the percentage increase to the rate of inflation plus 2%. If the rate of inflation were 4%, the maximum permitted increase in the rent of a $500 apartment would be $30. This rule could be implemented simply by altering the statutory increase under the current regulations.

If implemented in Ontario now, a liberalized rent review scheme would immediately lead to an increase in the average rents of rent controlled apartments. Under the formula suggested above, the increase facing individuals could not exceed 6% (the rate of inflation plus 2%). In subsequent years, rents would rise more slowly because of increasing vacancy rates. Applying the work of Fallis and Smith we can be confident that the final increase in real rents would be less than 25% and would probably be of the order of 10%. In the later case, the adjustment would proceed for a period of about 5 years.

As real rents rose, the demand for housing services would decline. Applying an elasticity of -0.5 to a 10% increase in rents suggests that the total demand for housing services would fall by about 5%. This is equivalent to a reduction of about 50,000 units over the three year period. This would approximately offset the projected increase in rental households. Vacancy rates would probably increase somewhat, but not sufficiently to completely restore "normal" conditions. Expectations of future real rent increases would significantly increase the capital value of existing rental units. This would reduce pressure for demolition or conversion. Real rents would continue to rise slowly until they equalled the economic rent on new buildings. At this point some entrepreneurs would begin to construct new rental housing.

There is no reliable information on the exact amount by which rents would rise before economic levels were obtained. Calculations based on the cost of new units almost certainly overstate the economic rent on the existing stock, because the latter is determined purely by land values and the value of the existing structure in alternative forms of tenure.

Thus pressure to convert and demolish the existing stock would largely cease before the economic rent on new construction was reached.

Rises in rent would also be limited by the demand for housing. Given an elasticity of demand equal to -.5, a 15% increase in real rents would reduce demand by a total of 75,000 units or 7.5% of the total stock. Such a decrease would almost certainly restore normal vacancy rates in the rental market. Since the calculations reported in Chapter IV suggest that some new rental supply would be economic at rents about 15% greater than current levels, this appears to be a reasonable maximum increase in real rents. Under the scheme proposed above, this increase would be spread over a 7 to 8 year period.

Such a scheme would make a dramatic impact on conditions in the Ontario rental market. The rental housing shortage would be eliminated: normal vacancy rates would prevail and rental housing of all types would be readily available for those seeking it. Horizontal inequities in the treatment of occupants of controlled and uncontrolled apartments would be eliminated. There would be no significant problem of individual rent gouging, although the general level of rental prices would be clearly higher than previously. Security of tenure problems would be largely unaffected.

The scheme considered above would not necessarily mean the elimination of socially assisted housing projects. In fact, under the current funding rules, the subsidy required to make up the difference between low end of the market rents and economic rents would be significantly reduced. This would mean that under the current non-profit and co-operative housing programs much more money would be available to provide subsidies to low income tenants.

Higher rents would also encourage smaller homeowners to convert their dwellings to provide rental units. The quantitative importance of this result is difficult to measure but it could be of significant importance in providing appropriate accommodation for lower income tenants and in conserving the stock of existing housing.

The effect on social diversity is difficult to predict. As noted above it would become easier to maintain social diversity in non-profit projects because less of the subsidy would be devoted to subsidizing market tenants. To some extent they would also increase the availability of rental housing in the city core. Some of this additional housing would be suitable for low income tenants. Nevertheless, higher rents would also tend to make it more difficult for some families to live in the centre of large cities, especially Toronto, and this could reduce social diversity.

By reducing the subsidy required for market tenants, the liberalized rent review scheme would provide more funds for other public goals. These might include funding other housing programs for very low income groups or reducing cuts in other social programs.

Unfortunately, all these positive results of a liberalized rent review program would come at the expense of increased rents. While a rise in real rents would partly be only a restoration of their levels of 15 years ago, there would be a clear increase in the number of households with affordability problems. Table 5.1, extracted from Miron and Cullingworth, provides some indication of the magnitude of the problem. The table indicates that the incidence of problem households (those with shelter/income ratios in excess of 25%) in Ontario is very sensitive to the assumed increase in rents. In particular, if real rents were to rise by 10% Miron and Cullingworth estimated that the number of households with affordability problems would rise by 19%, while if real rents were to rise by 15%, the number of problem households would increase by 27%.

These numbers should be interpreted with caution. Not only are they susceptible to all the difficulties of interpretation discussed in Chapter II, they also clearly overestimate the number of problem households by neglecting the effect of higher rents on household formation. Higher rents would cause many young singles to share accommodation or postpone leaving home, and they might encourage some older individuals to do likewise. These effects would reduce the number of households observed to have affordability problems. Nevertheless it would be foolish to deny that allowing real rents to increase would raise the burden of shelter payments for many low-income households.

TABLE 5.1: NUMBER OF PROBLEM HOUSEHOLDS WITHOUT RENT REVIEW;
ONTARIO, 1978. (1)

PERCENTAGE CHANGE IN 1978 RENTS IN THE ABSENCE OF RENT REVIEW	ESTIMATED NUMBER OF PROBLEM HOUSEHOLDS	INDEX
HIGHER BY 25%	342,500	141.5
HIGHER BY 20%	325,800	134.6
HIGHER BY 15%	307,600	127.1
HIGHER BY 10%	287,700	118.9
HIGHER BY 5%	265,900	109.9
NO CHANGE	242,000	100.0
LOWER BY 5%	227,600	94.0
LOWER BY 10%	211,600	87.4

NOTE: 1. ASSUMING DIFFERENT UNIFORM PERCENTAGE CHANGES IN RENTS.

SOURCE: DERIVED FROM MIRON AND CULLINGWORTH; 1983, 130.

A number of objections or difficulties would be raised in attempting to implement a liberalized rent review formula. Among these are the possibility that rents might be pulled above market levels, the possible need to distinguish between transitional and permanent formulas, and difficulties arising from attempting to tie changes in rents too closely to changes in inflation. Additional problems arise from the different position of pre-1976 and post-1975 buildings. Finally one must consider the credibility of the policy.

One objection to a rent review formula which allows for more than inflationary increases is that, if continued, the formula would eventually allow statutory rents in excess of market levels. Conventional economic theory suggests that there will be a strong tendency for prevailing rents to fall below the allowed rents under such circumstances. Many object, however, that the statutory increase will act as a signal, encouraging landlords to raise their rents by more than they would otherwise and encouraging tenants to accept such increases. This would not raise difficulties while most rents were below market levels, but might become a problem if the formula were permanently in place.

It is difficult to bring evidence to bear on the objection. While it undoubtedly has some merit, its quantitative importance is not easily assessed. The phenomenon of tenancy discounts indicates that sitting tenants are frequently charged less than the unregulated markets would bear. Provided that landlords do not foreclose future catchups by charging less than the statutory increase, this tendency should continue under the scheme considered here. Consequently the author's opinion is the problem of rents in excess of market levels is not severe. It must be recognized, however, that political objections could be sustained on this point.

One response to the difficulty just raised would be to distinguish between transitional and permanent formulas. The transitional formula would continue until it was judged that economic rents had been achieved, after which a permanent formula more closely tied to inflation would be imposed. Such a response creates a number of difficulties.

One problem is that the diversity of buildings and financing arrangements will lead to landlords achieving market rents at different times. Any switchover to a permanent formula would be bound to trap some owners in a relatively disadvantageous position.

Perhaps a more serious objection is that any attempt to link rent increases precisely to the rate of inflation faces serious difficulties because, in an uncontrolled environment, the ratio of increased rents relative to inflation will normally fluctuate. In addition to random fluctuations, there may be a tendency for real market rents to fall during periods of increasing inflation (due to competition from relatively more attractive home ownership) and to rise during periods of declining deflation when the tax advantages and potential capital gains from home ownership are less important. If allowed increases precisely equal the rate of inflation, it may be difficult for landlords to capture the entire increase allowed in times of increasing inflation and impossible for them to compensate in times of reduced inflation.

Two final problems require consideration. While rents on effectively controlled pre-1976 rental units are clearly below market, the rents charged on post-1976 buildings may be considerably higher. Allowing the owners of recent buildings an increase above the rate of inflation may seem unfair and unnecessary. Finally, the incentives to new rental construction and preservation of the existing stock will not be effective unless landlords are confident that new, more restricted formulas will not be imposed in the future. In light of past government actions, this confidence may be difficult to inspire.

2. Rate-of-Return Regulation

A second method of liberalizing rent regulation would be to introduce a system of rate-of-return regulation designed to provide a fair rate of return of owners' equity. In contrast to the statutory increase formula, which restricts rent increases, a rate-of-return regulatory scheme would attempt to regulate rent levels.

In an earlier submission to the Inquiry, Quirin (1985) has discussed the issues surrounding rate-of-return regulation and has proposed a model scheme. We will first examine his scheme as an example of rate-of-return regulation and then consider some general difficulties which confront any such scheme.

In Quirin's scheme each regulated property would have a registered value consisting of components representing 1985 land value and 1985 building value plus improvements. The allowed rent in any year would be the sum of an operating cost component, a debt service component, an equity return component, and an income tax component. Operating costs would be passed through entirely to tenants.

The debt service component would consist of interest payments on the outstanding mortgage plus an allowance for depreciation, calculated on the sinking fund method.[1] The equity return component would be computed by applying an allowed real rate of return to the inflation-adjusted equity base. The equity base is calculated as the difference between the inflation-adjusted registered building value less outstanding debt at the beginning of regulation and depreciation. Apparently the depreciation is to be calculated by the sinking fund method. Finally, the equity component would be adjusted to yield a "fair" rate-of-return on an after-tax basis.

Provided the allowed rate of return on equity investment were sufficiently high, this scheme would attract funds into residential rental construction whenever demand conditions were such that owners could be reasonably sure of earning the specified return. Unfortunately, the scheme does exhibit some peculiarities which could lead to problems of implementation.

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[1] In any year accumulated depreciation under the sinking fund scheme equals the accumulated value of a sinking fund established to replace the building at original cost at the end of its useful life. This implies that the allowed depreciation for the year equals the original sinking fund payment with accumulated interest. In Quirin's scheme the allowance would be adjusted to current year price levels using the CPI.

Table 5.2 exhibits the allowed rent and its components under the Quirin scheme, using the same basic parameters which underlie Table 4.6 of Chapter IV. Briefly, this assumes a $64,000 unit, with a mortgage of $54,000 amortized over 30 years at 13 per cent. Land costs were assumed to account for $8,000 of the $10,000 of equity. It was assumed that the unit could be resold for $20,000 (expressed in base year prices) after 40 years. The required rate of return on equity was assumed to be 10%. Finally costs were assumed to rise at 4% per year.

Under Quirin's scheme, cash flows are positive throughout the life of the project. The allowed rent begins at $847 per month, rises to a peak of $1979 in the 34th year and then falls by almost $200 per month to $1785 in the 40th year of the project's life. Expressed at base year price levels, the monthly real rent starts at $814 and then falls increasingly rapidly to reach $372 in the 40th year. Figures 5.1 and 5.2 illustrate this effect.

TABLE 5.2: ALLOWED REVENUE, CASH FLOW AND REAL MONTHLY RENT

YEAR	Oper. Costs	Debt Serv. Comp.	Eq. Ret. Comp.	Income Tax Comp.	Allowed Revenue	Annual Cash Flow	Real Rent/mo.
0						($10,000)	
1	$2,496	$7,369	$600	($300)	$10,165	$1,540	$814
2	$2,596	$7,366	$743	($157)	$10,548	$1,600	$813
3	$2,700	$7,361	$890	($10)	$10,941	$1,665	$811
4	$2,808	$7,354	$1,042	$142	$11,346	$1,735	$808
5	$2,920	$7,344	$1,199	$299	$11,762	$1,809	$806
6	$3,037	$7,332	$1,360	$460	$12,188	$1,887	$803
7	$3,158	$7,316	$1,526	$626	$12,626	$1,969	$800
8	$3,285	$7,296	$1,697	$797	$13,074	$2,054	$796
9	$3,416	$7,271	$1,873	$973	$13,532	$2,140	$792
10	$3,553	$7,240	$2,053	$1,153	$14,000	$2,227	$788
11	$3,695	$7,204	$2,239	$1,339	$14,477	$2,315	$784
12	$3,842	$7,160	$2,430	$1,530	$14,963	$2,401	$779
13	$3,996	$7,108	$2,626	$1,726	$15,456	$2,485	$774
14	$4,156	$7,046	$2,827	$1,927	$15,956	$2,566	$768
15	$4,322	$6,974	$3,033	$2,133	$16,462	$2,641	$762
16	$4,495	$6,889	$3,245	$2,345	$16,973	$2,710	$755
17	$4,675	$6,789	$3,461	$2,561	$17,487	$2,769	$748
18	$4,862	$6,673	$3,683	$2,783	$18,001	$2,818	$740
19	$5,056	$6,538	$3,910	$3,010	$18,515	$2,853	$732
20	$5,259	$6,382	$4,143	$3,243	$19,027	$2,871	$724
21	$5,469	$6,201	$4,381	$3,481	$19,532	$2,870	$714
22	$5,688	$5,992	$4,624	$3,724	$20,029	$2,846	$704
23	$5,915	$5,752	$4,873	$3,973	$20,514	$2,795	$694
24	$6,152	$5,475	$5,128	$4,228	$20,982	$2,712	$682
25	$6,398	$5,157	$5,388	$4,488	$21,431	$2,593	$670
26	$6,654	$4,792	$5,654	$4,754	$21,854	$2,431	$657
27	$6,920	$4,373	$5,927	$5,027	$22,247	$2,221	$643
28	$7,197	$3,894	$6,206	$5,306	$22,603	$1,955	$628
29	$7,485	$3,346	$6,492	$5,592	$22,914	$1,625	$612
30	$7,784	$2,719	$6,785	$5,885	$23,174	$1,221	$595
31	$8,096	$2,004	$7,086	$6,186	$23,372	$7,939	$577
32	$8,419	$2,124	$6,964	$6,064	$23,572	$7,862	$560
33	$8,756	$2,252	$6,796	$5,896	$23,699	$7,743	$541
34	$9,106	$2,387	$6,575	$5,675	$23,743	$7,576	$521
35	$9,471	$2,530	$6,294	$5,394	$23,689	$7,354	$500
36	$9,849	$2,682	$5,947	$5,047	$23,525	$7,070	$478
37	$10,243	$2,843	$5,525	$4,625	$23,235	$6,717	$454
38	$10,653	$3,013	$5,018	$4,118	$22,802	$6,284	$428
39	$11,079	$3,194	$4,416	$3,516	$22,205	$5,762	$401
40	$11,522	$3,386	$3,708	$2,808	$21,423	$101,160	$372

NOTE: The internal rate of return of the annual cash flows over the forty years is 19.28%

Source: Staff of the Commission of Inquiry into Residential Tenancies

FIGURE 5.1

NOMINAL RENTS UNDER QUIRIN'S RATE-OF-RETURN SCHEME

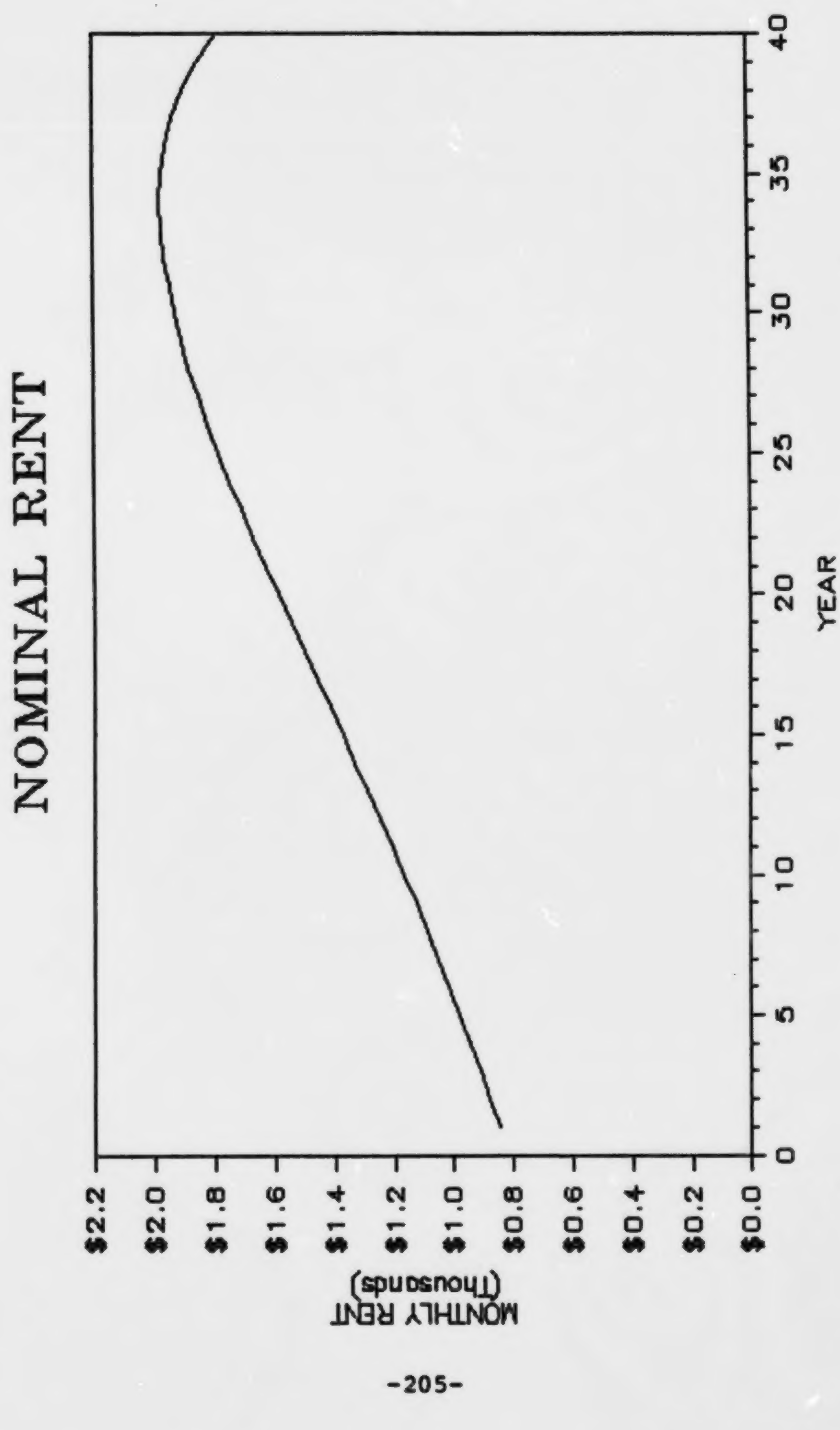
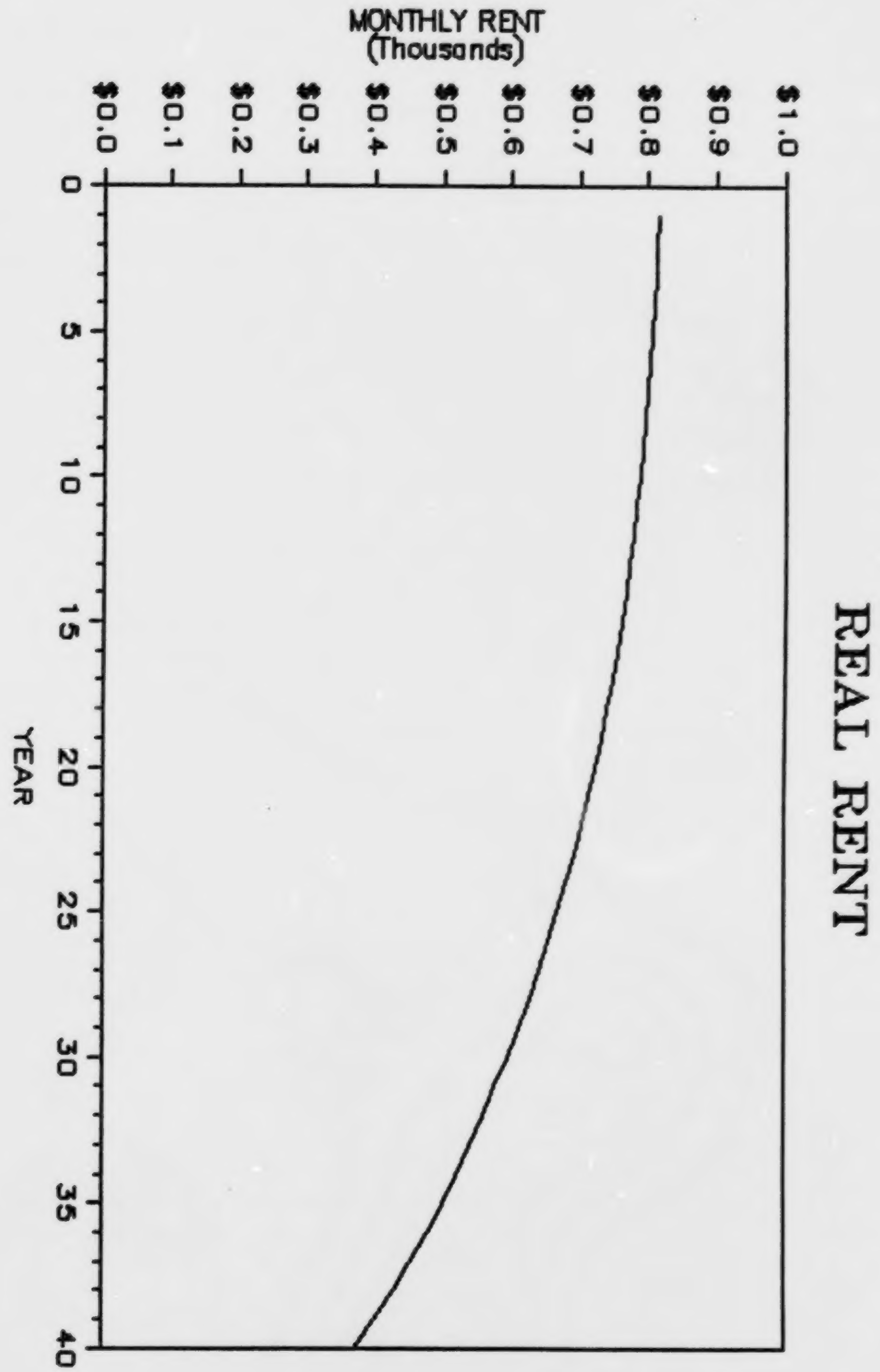


FIGURE 5.2

REAL RENTS (IN BASE YEAR DOLLARS) UNDER QUIRIN'S RATE-OF-RETURN SCHEME



The initial rent under Quirin's proposal is much higher than the economic rents calculated for a similar project in Chapter IV. It will be recalled that in the base case considered earlier, an initial rent of $592 was sufficient to produce a 10% rate of return on equity, but that negative cash flows would be encountered for 11 years. Quirin's scheme eliminates the negative cash flow in the early years of the project and dramatically reduces cash flow in the later years by tilting the rent payment schedule.

Imposed without modification, Quirin's scheme would have two severe defects. First, the high initial rents could not be achieved until market rents had risen far above the rent which would induce entry into an uncontrolled market. Secondly, the scheme does not achieve its goal of restraining the landlords' return to a "fair" level. Table 5.2 indicates that the internal rate of return on the investment project is over 19%, or 9 points higher than the "fair" return of 6% plus 4% inflation.

On the positive side, when compared with some other implementations of rate-of-return regulation, Quirin's scheme allows for higher cash flows in the later years of a project's life. This will tend to raise the capital value of older buildings and encourage renovation and conservation, but not by as much as would occur in an uncontrolled market.

It appears that the application of the Quirin scheme in the present Ontario market would not induce significant new construction (because the required rent would be too high).2

The scheme has not been sufficiently analysed for us to know whether these defects would be remedied by the grouping of units which Quirin suggests nor whether application of the formula to the existing stock would lead initially to an increase or decrease in average rents. Since the real rent level depends on the age of the building, there is considerable potential for horizontal inequities in the treatment of tenants occupying otherwise comparable accommodation.

We now turn to difficulties which might arise in any scheme of rate-of-return regulation. A central difficulty concerns the number and diversity of landlords and diffiulty of anticipating future events in devising a regulatory formula. Other, more technical criticisms can be made of almost any specific scheme.

The large number and diverse nature of Ontario landlords has been well documented by the Inquiry. (see Pringle, 1985) Although a small number of large landlords account for a large fraction of all units, there are literally hundreds of thousands of landlords with small portfolios. To subject all of these to rate of return regulation would entail high compliance and administrative costs. For this reason, Quirin suggests that very small landlords be exempt from rate of return regulation and that participation by the remainder be optional. Non-participants would be covered by

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2. This might be offset by an entrepreneurial decision to charge less than the allowed rent in early years, provided this did not foreclose the option of raising rents later.

a guideline formula similar to that discussed in the previous subsection. This suggests that a workable rate of return regulatory system must include adjustments to guideline formula, as discussed above.

For those properties remaining under regulation, there remains the difficulty of establishing an initial rate base. Quirin's proposal is to estimate the 1985 value of buildings by inflating pre-1975 transactions by the CPI. This poses equity problems for landlords who acquired their buildings well before 1975. These landlords had unrealized capital gains in 1975 which would, in effect, be confiscated if their historic equity base was calculated by adjusting the original purchase price. The importance of this effect is offset by the high returns to older buildings in Quirin's scheme, but such high returns are very sensitive to the details of the regulatory formula.

To summarize, any attempt to regulate rental buildings on the basis of a "fair rate of return" faces very substantial difficulties. First, the majority of cases must be exempted from the detailed process and treated under a rule of thumb. Secondly, it appears to be extraordinarily difficult to design a regulatory formula which provides a "fair rate" of return on an annual basis and also leads to reasonable internal rate of return over the entire project. Thirdly, because they avoid negative cash flows in the early years of rental projects, most regulatory schemes lead to allowed rents in the initial years which are too high to be sustained in the market. Finally, the usual pattern of real rents is to fall over the life of the project in a manner which would create inequities among inhabitants of buildings of various ages and which, again, could not be sustained in the market.

3. Rent Arbitration

A third possible modification of rent review would be in the direction of rent arbitration. Such a scheme is operative in Quebec.[3] In this scheme, rents are settled independently of the rent commission unless a tenant appeals. If a tenant feels the rent increase is unfair, he can have it reviewed by an arbitration officer who applies a known formula to determine a fair return for the unit. Such a scheme is designed primarily to protect individual tenants against exploitation by landlords with local market power. Vacant units are not controlled and can be rented at what the market will bear.

The effect of an arbitration scheme will depend upon the formula used in arbitrating disputes. Stanbury and Vertinsky (1985, v.1, 2-18) note that there is a danger of circularity if the formula is based on rents of comparable units which are also under review. Moreover, if the formula does not provide a sufficient rate of return to landlords, then the difficulties associated with more stringent systems of rent control remain.

The chief attraction of a rent arbitration scheme lies in its voluntary nature. This should both allow a reduction in the total number of cases dealt with by the tribunal and increase the ability of landlords and tenants to negotiate mutually agreeable changes in rents. Examples of the latter would be an agreement by tenants to rent increases which would allow a landlord to proceed with certain capital improvements or maintenance expenditures.

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[3] For a description, see Des Rosiers (1985).

A rent arbitration scheme which successfully mimicked market rents except for discouraging individual cases of rent gouging would lead to the same beneficial results discussed under the heading of modifications to the formula. Nevertheless, a number of objections can be raised against it.

Perhaps the most serious is that any rent arbitration scheme requires a formula for the guidance of the arbitrators. The scheme can be no better than its formula. Consequently the problems involved in setting guideline increases or rate-of-return formulas remain.

A second objection can be raised against the concept of vacancy decontrol. Although vacancy decontrol is attractive in many aspects, noticably in protecting sitting tenants from exorbitant rent increases and in not penalizing landlords who grant tenancy discounts on rational or compassionate grounds, it creates significant incentive to turn out tenants in order to obtain higher rents.

There is also some evidence that vacancy decontrol leads to a wide variation of rent increases, thus leading to horizontal inequities among tenants of comparable units.

Finally, existing rent arbitration schemes focus mainly on the relation between landlords and individual tenants. It is not clear that the present practise of whole building rent review could be incorporated into such a scheme. Loss of whole building review would increase administrative costs and could lead to horizontal inequities among tenants.

4. Summary of Alternatives to Rent Regulation

In this selection we have considered three methods of liberalizing rent review: modifications of the present formula, application of rate of return regulation and application of a rent arbitration scheme. To the extent that they allow returns to landlords to approximate market returns, they have very positive effects on most housing policy objectives. Unfortunately, all schemes reduce the affordability of rental housing for low income groups.

The schemes vary in complexity. It appears unavoidable that some rule of thumb formula must be applied in the majority of cases, to avoid excessive administrative and compliance costs. It appears difficult to design a rate of return regulation scheme which provides "fair" annual returns without also providing excessive long run returns. Rent arbitration schemes suffer from certain administrative objections. Consequently, modifications of the present formula for statutory increases may be the most promising approach.

B. Demand Side Policies

In this study, rental housing policies will be classified as demand side policies if their initial effect is to increase the demand for housing at any given level of rent.[4]

Demand side policies can be classified by the degree to which income support is tied to the consumption of housing. Under an income maintenance scheme, target households receive a payment which may be related to income but which does not alter the effective price paid for housing services. The Canadian family allowance, the Guaranteed Income Supplement and the Universal Income Security Plan proposed by the MacDonald Commission (see below) are examples of such a plan. These schemes do not increase the demand for housing beyond that which would normally be associated with an increase in disposable income.

Housing or Shelter Allowances are the most commonly discussed demand side policy instrument. Various forms of shelter allowance have been proposed or tested in Canada and the United States over the past twenty years. These schemes typically provide a payment which is related both to family income and to the rent actually paid. For example, Steele (1985) discusses "income conditioned percentage of rent" shelter allowances in which the assistance is proportional to the gap between a households' gross income and a specified fraction of their income. Payments can be constrained by specifying a ceiling to the rent which enters the formula. These allowances both increase the income of qualifying households and reduce the effective price that some of them pay for housing services. The demand for housing services thus increases for two reasons.

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[4] Economists refer to this as a shift in the demand for housing, because the demand curve in a diagram such as Figure 3.1 shifts to the right.

Rent Supplements are payments made to reduce the rental burden for households occupying specified units. In Canada, rent supplement plans have been implemented by paying to landlords the difference between a negotiated "market" rent for a specific unit and a subsidized rent related to a household's income. Tenants are normally drawn from the waiting list for subsidized accommodation. Chant (1985) categorizes rent supplement programs under the rubric of supply side programs, but because they affect the incentives faced by consuming households more than those of private landlords, this study treats them as demand side policies.

Demand side policies, and shelter allowances in particular, have been discussed in detail by Chant (1985).

In this section, we quickly review our knowledge about the effect of demand side policies on the level of rents and the quantity of housing services consumed. The presence or absence of a binding system of rent control will alter the outcome of the policies. We then consider the effect of demand side policies on the performance of the housing market, as measured by our objectives for rental housing policies.

1. Theory and Evidence

We consider first the predictions of economic theory and secondly the empirical evidence on demand side policies.

All three demand side instruments raise the demand for housing services, both from existing households and households that form in response to increased affordability.[5] If there is no binding system of rent control in operation, economic theory predicts that demand side rental housing policies will raise rents and increase the total consumption of housing services in the short run. Those groups receiving maximum assistance will increase their consumption of housing, while those groups receiving no assistance will face higher rents and consequently will reduce their housing consumption. In the long run, theory predicts that more rental housing will be constructed (or less will be demolished). In the long run rents will remain at the economic rent, unless the increased demand for housing has driven up the price of land so much that the economic rent itself has risen.

These predictions are illustrated in Figure 5B.1. In this figure, it is assumed that the market is initially in long run equilibrium. The demand schedule for rental housing (D_1) intersects the short-run supply schedule (S_1) at the economic rent (r_e). The consumption of housing services equals h_1.

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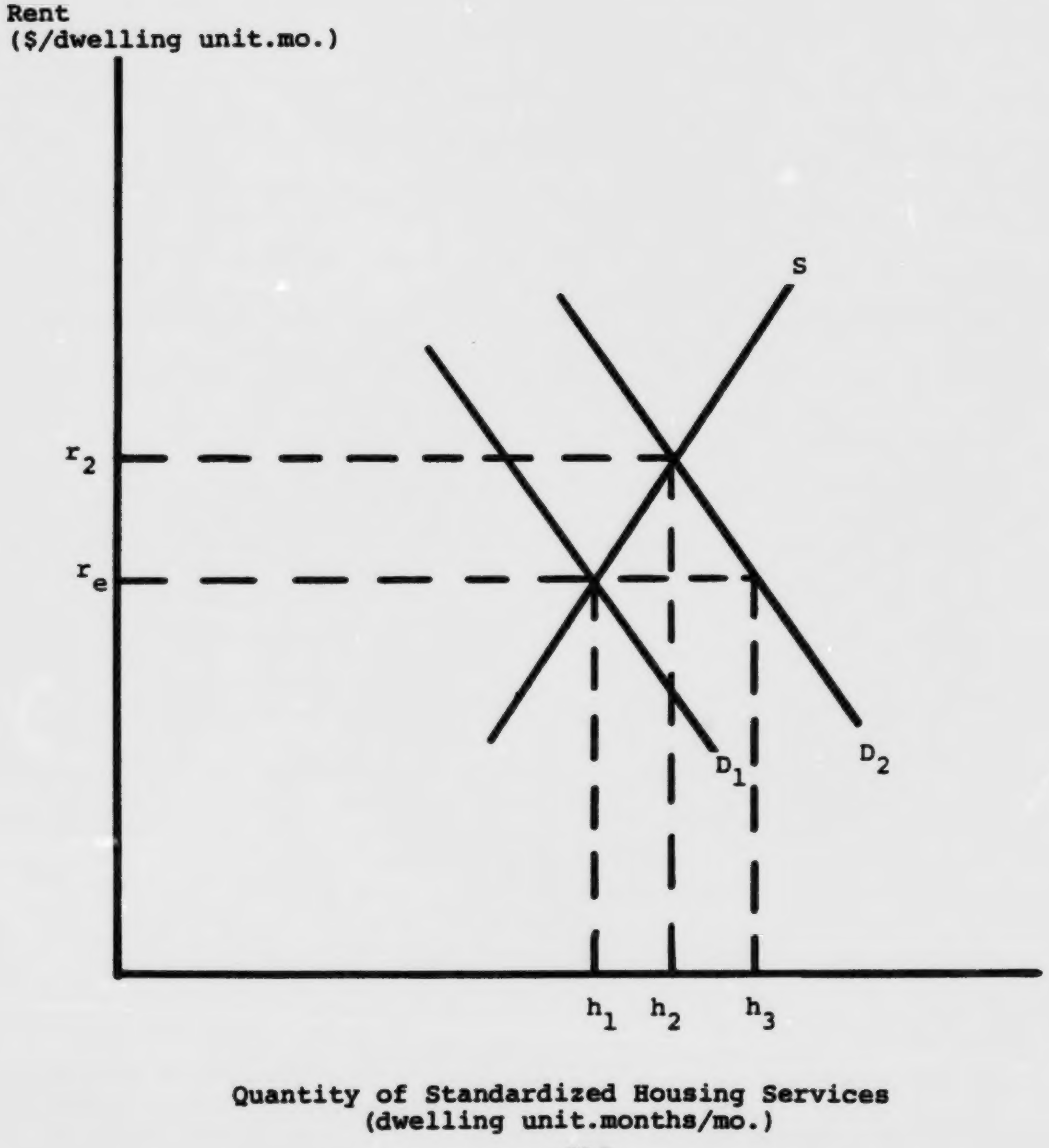
[5] For evidence that income, rents and the availability of public housing all increase the headship rate (number of households per thousand population), see Smith et al. (1984).

FIGURE 5B.1

DEMAND SIDE POLICIES
WITHOUT RENT CONTROL



Quantity of Standardized Housing Services
(dwelling unit.months/mo.)

When a shelter allowance or demand side policy is introduced, the immediate effect is to shift the demand curve for housing rightwards to D_2. The rent rises to r_2 and housing consumption rises to h_2. The amount of increased consumption depends on the shape of the supply curve.

Although the rent has risen, it is clear that total housing consumption has also risen. This is because the groups that receive maximum assistance have received enough extra income to increase their housing consumption despite the higher rents. On the other hand, those groups that receive no assistance face higher rents and constant incomes. They will tend to reduce their consumption of housing. Thus the effect of a housing allowance is to increase the rental housing consumed by lowest income groups and decrease the rental housing consumed by higher income groups.

Even if the short run supply curve is completely vertical, a shelter allowance will reallocate housing from those receiving no allowance to those receiving the maximum. Groups who receive an intermediate allowance may or may not increase their housing consumption.

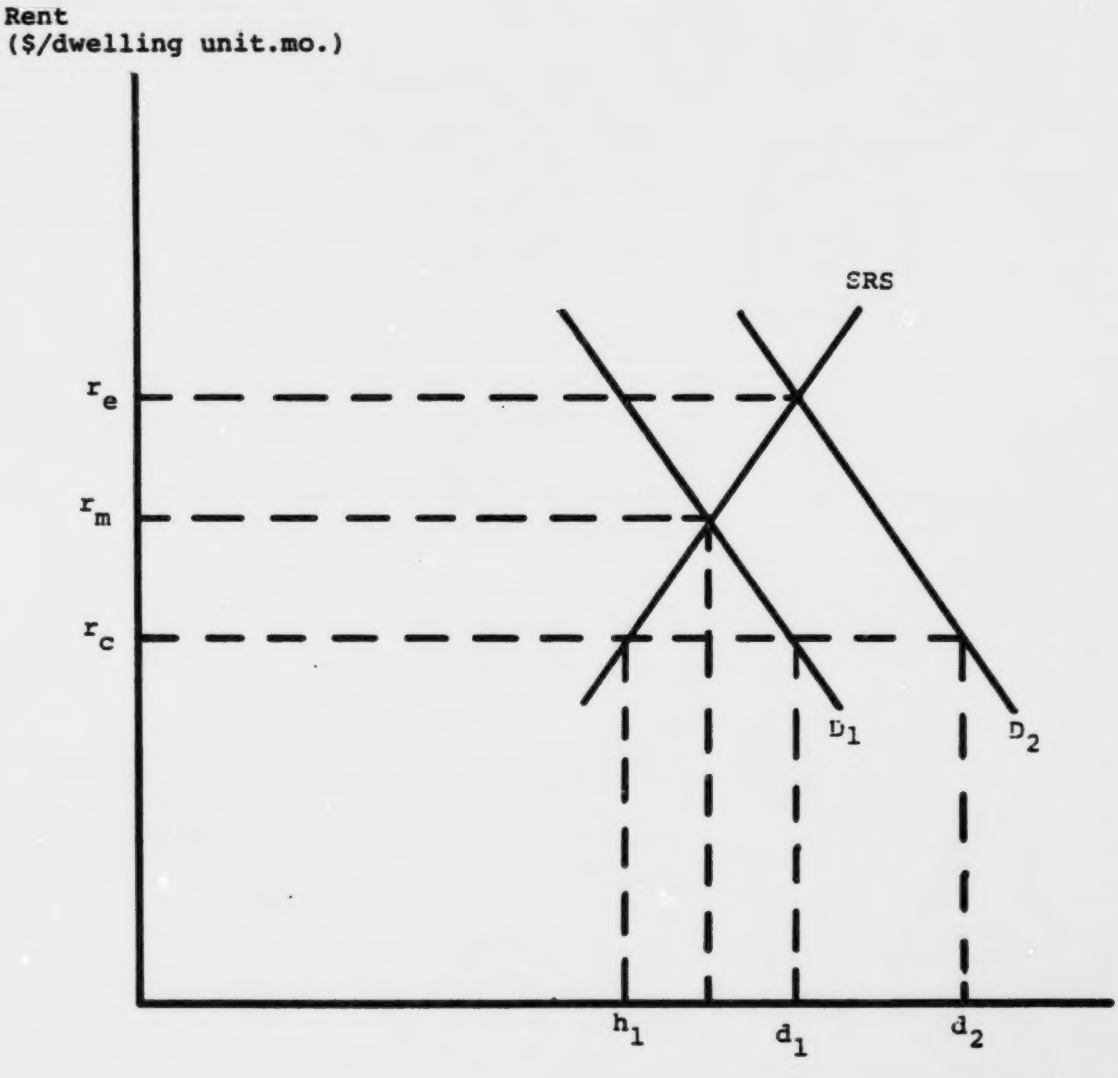
In the long run, new housing will be constructed if the rent r_2 exceeds the economic rent (r_e). The short run supply curve will shift rightwards until the rent falls to r_e. The total amount of housing consumed will have increased to h_3. Since the original rent has been reestablished, groups receiving no shelter allowance consume housing services at the original level, while all those receiving allowances have increased their consumption. The only exception to this outcome will occur if the effect of the housing allowance is to increase the price of land so much that the economic rent rises.

If there is a binding system of rent control, economic theory predicts quite a different outcome. In this case, the total amount of housing cannot increase because the rent received by landlords is held constant. Figure 5B.2 illustrates this case. In this figure it is assumed that the controlled rent (r_c) is less than the market rent (r_m) and the market rent in turn is less than the economic rent (r_e). Before the demand policies are applied, h_1 units of housing are supplied and d_1 units are demanded. There is an excess demand for rental housing which is manifested in waiting lists, low vacancy rates, and various forms of key money.

When some groups receive a shelter allowance, the demand curve shifts rightwards to D_2. In the short run, the excess demand for housing increases from (d_1-h_1) to (d_2-h_1). The increased excess demand will be manifested in increased waiting lists and increased side-payments of various sorts. All income groups will suffer from these effects, but the position of those groups receiving the maximum subsidy will be improved relative to others, since they will now have more income to spend in searching for accommodation.

FIGURE 5B.2

DEMAND SIDE POLICIES WITH BINDING RENT CONTROLS



Quantity of Standardized Housing Services
(dwelling unit.months/mo.)

In the long run there will be continued pressure to reduce the rental housing stock if, as shown, the controlled rent is below the economic rent. This will increase the amount of excess demand and the frustrations which accompany it.

Although the author is unaware of reported evidence on the effects of demand side policies in a rent controlled environment, a significant amount of evidence has been assembled on the effects of shelter allowances in uncontrolled markets. This evidence is summarized and discussed by Chant (1985, ch. 4). Most of it comes from the Experimental Housing Allowance Program (EHAP) in the United States.

The EHAP program[6] consisted of three separate experiments. One, the administrative experiment, was designed to test alternative delivery systems and will not be further considered here. The supply experiment was designed to test the effect of housing allowances in local housing markets. In it, a housing allowance was made available to all eligible residents in two U.S. cities and the effect on rent levels was observed. The demand experiment was designed to test the effect of alternative forms of housing allowance on housing choice. In it, housing allowances which differed in various ways were offered to selected groups of residents. The major interest lay in determining the effects of the different programs on participation rates and the quality of housing consumed.

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[6] See Bradbury and Downs (1981) for a full discussion of the EHAP program.

The EHAP program led to two significant results which were not wholly anticipated by the experimenters. The demand experiment revealed that participation rates fell drastically when housing allowances were contingent on a household's occupying a housing unit that met some specified minimum standard of quality. For example Chant (1985, 224) reports that participation rates in Pittsburgh fell from 82% in an unconstrained program (in which payments were related to actual rents paid) to 30% in which the allowances were contingent on achieving minimum housing standards.

The EHAP supply experiment was remarkable in being entirely unable to detect the predicted rise in rents after the introduction of the housing allowance in either of the two cities. (Mills and Sullivan, 1981, 253-56). Chant (1985, 235) discusses alternative explanations for this result. Either the response of housing demand to the increased incomes from the EHAP program was very low, or the short run supply of housing was able to shift rapidly enough to accommodate the increased demand with no evident increases in rent. In terms of Figure 5B.1, the shift from D_1 to D_2 may have been small, the short run supply curve S_1 may have been very flat, or the curve may have shifted very rapidly to the right. Mills and Sullivan offer another explanation. Since it takes a significant amount of time for households to adjust to the increased income provided by a housing allowance, the demand curve shifts rightwards relatively slowly. This allows the short run supply curve to shift right simultaneously, avoiding increases in market rents.

Chant (1985, 235) cites further evidence by Steele confirming the lack of price response in housing allowance programs. He also refers to objections by Hulchanski (1983) that the results of the supply experiments should not be extended to Canada because the Canadian rental market is very tight and because the programs had insufficiently large coverage. Chant convincingly argues that the latter objection is not well founded and that the former is irrelevant if the main explanation of the lack of rent increase is the relatively small impact of the programs on total housing demand.

Since the demand and supply experiments were conducted in the absence of rent controls, their results are not immediately applicable to Ontario. However, if we accept that the results of the supply experiment were due primarily to a small or slow shift in demand, we can conclude that the effect of a similar program in Ontario would not be dramatic. Since the demand curve in Figure 5B.2 would shift right by only a small amount, excess demand for rental housing would not be significantly increased in the short run.

On the basis of this evidence, it seems that the immediate effect of a housing allowance program in Ontario would most likely be to raise the disposable incomes of households receiving the allowance without greatly increasing the demand for rental housing. In the long run the increase in demand would be greater as households adjust to the increased income and household formation increases.

This would not lead to an increase in rents unless there was a significant constraint on the construction of new rental housing, such as a binding system of rent controls.

2. Effect on Rental Housing Objectives

In this subsection we will relate the effects of demand side policies to the list of rental housing objectives established in Chapter I. We will consider each in turn.

Availability

Under the current system of rent review in Ontario, demand side policies will not increase the general availability of rental housing, in fact they will decrease it. This is because, as shown in Figure 5B.2, an increase in demand under a binding system of rent control increases the excess demand for rental housing without stimulating conservation or new construction. To the extent that demand side policies increase the demand for rental housing, they will exacerbate the low vacancy rates presently observed. In addition they will increase the tendency for landlords and sitting tenants to discriminate or charge key money.

In light of the results of the supply experiment, however, the rightwards shift in demand is likely to be slow and relatively small. This means that the perverse effects of demand side policies are likely to be relatively minor. Moreover, by providing low income tenants with relatively more income, the demand side policies might improve their ability to meet the extra-legal demands of landlords or sitting tenants.

Under a modified form of rent review, such as rent arbitration, demand side policies should have very little effect on availability. Under a rent arbitration scheme which allows rents to rise to cover the full costs of landlords, there should be a tendency for the natural vacancy rate to be established. Past experience indicates that this is normally sufficient to assure an adequate inventory of available units.

Under a rent arbitration scheme, demand side policies should lead to an increase in the rental housing stock, since normal profits could be made by supplying housing to meet the increased demand. Nevertheless, if the speed with which the market adjusts to excess demand depends on the gap between market and economic rents, the ability of the market to adjust rapidly to shifts in demand might be compromised by a scheme which prevented market rents from rising much above the economic rent in the short run.

Affordability

The evidence from the EHAP experiments indicates that most of the income from housing allowances is spent on goods and services other than housing.[7] This means that the share

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7. See Hanushek and Quigley (1981) especially p. 209. After two years of the demand experiments, the percentage of housing allowance used for increased housing expenditures ranged from -0.4 to 24.

of rent in total family expenditure is likely to decline under a housing allowance scheme. Thus demand side schemes are likely to increase the affordability of housing for low income groups. An exception can occur if a household spends its additional income more than proportionally on housing. This might occur if the housing allowance permitted a move to clearly superior accommodation or if the housing allowance were tied to actual rent payments. In this case, the ratio of rent to income could rise, even though actual expenditures on goods other than shelter had increased. While possible, the evidence cited above indicates this is unlikely. Consequently, demand side policies are judged good in improving the affordability of housing for target income groups.

Rent Gouging

In this paper, rent gouging has been defined as a rapid rise in the general level of rents. On this definition, demand side policies have the potential for increasing rent gouging by leading to higher rents in the short run. This can only be a serious problem if the demand shift is sudden and substantial while the short run supply curve is inelastic and slow to adjust. The data from the EHAP experiment show convincingly that this is unlikely to occur under most forms of housing allowance. The reason is that housing allowances do not seem to lead to a rapid rise in housing expenditures because recipient families are slow to adjust to increased incomes, because the share of housing in increased expenditures is low in any case, and because recipients form a relatively small fraction of the total population.

The EHAP results were obtained in a non-rent-controlled environment. If there is a binding system of rent controls, generalized rent gouging cannot occur unless allowable costs increase rapidly. Consequently, a demand side policy is not likely to lead to rent gouging. However, since rent controls inhibit the market's ability to provide new rental housing and encourage reduction in the existing stock, demand side policies may increase the level of excess demand in the market. While this cannot lead to increased rents, it might in principle lead to increased exploitation of individual households. In particular, if vacancy rates are very low so that moving is difficult, landlords would have an incentive to impose illegal or disguised rent increases, perhaps by shifting maintenance or operating expenditures to tenants. No evidence is available on this point. Chant (1985, 284) concluded that the problem is likely to be of minor significance.

Security of Tenure

Demand side rental housing programs do not affect the contract between tenant and landlord, and hence do not affect security of tenure, narrowly defined. Chant (1985, 241) argues that demand side programs improve security against economic eviction since they reduce the burden of rental payments in times of reduced income.

Social Diversity

The effect of demand side programs on social diversity has not been discussed extensively in the Canadian literature. Rossi (1981) and Leigh (1981) provide a useful discussion of the impact of the EHAP experiments on mobility and segregation in the United States, although caution should be applied in extrapolating their results to the quite different social environment in Canada. Rossi concludes that although the demand experiment seems to have modestly increased residential mobility, any effect on improved social integration was too weak to be detected in the light of many statistical problems. Both Rossi and Leigh stress that mobility is not unambiguously good. On the one hand, it is only through mobility that increased social integration can be obtained, but on the other hand a positive value is usually placed on social stability.

In Canada, demand side programs would probably increase the mobility of tenants somewhat, unless this was prevented by severe availability problems induced by binding rent control. There is no evidence that this would increase social diversity beyond what would occur without intervention. Nevertheless, ghettoization of recipients of housing assistance would probably be less under an housing allowance scheme than under the 100% subsidized public housing schemes implemented in the past. As discussed below, however, a carefully designed program of direct provision of rental housing can have positive effects on social diversity.

Equity

Demand side policies, as exemplified by shelter allowances, can be much more equitable than present rental housing policies, although some inequities are likely to remain.

The main horizontal inequity in present housing programs is uneven coverage. As noted in Chapter II, public housing programs reach only a small fraction of those who qualify for assistance because the stock of rent-geared-to-income units is small relative to the number of households in core need. Participation in demand side programs income maintenance and shelter allowance programs is not limited by the stock of specially designated units, and consequently a much higher fraction of the households in core housing need can receive assistance.[8] Experience shows, however, that even housing allowance programs do not achieve 100% participation from target groups (See Chant, 1985, Table 4.4). Participation in the EHAP experiment was highest when no minimum housing standards were imposed, but even then between 10 and 22 percent of eligible households failed to participate. When recipients were required to meet certain minimum housing standards as a condition for the allowance, participation dropped drastically. Between 39 and 70 percent of eligible households failed to participate in these programs. Thus housing allowances can increase the fraction of target groups which receives assistance, but cannot guarantee universal coverage.

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[8] This is not true of rent supplement programs.

If a housing allowance is directed only towards renters, an important horizontal inequity between tenants and homeowners can develop. This is particularly unfortunate, since it penalizes those households which have made sacrifices in the past to acquire secure housing.

The main vertical inequity in present housing programs lies in the large fraction of total subsidy payments which is received by middle income households which are not in serious need. For example Stanbury and Vertinsky (1985, 6-112) estimate that, in 1981, 44 percent of the tenants of rent controlled apartments had incomes less than $15,000. These households received only 16.5% of the benefits of rent control, while the remaining 56 percent of households received 83.5%. Because housing allowances can be adjusted to income, this source of inequity can be greatly reduced.

Turning to more general concepts of "fairness", income maintenance and shelter allowances may be seen as more fitting to human dignity than present rental housing policies, because they allow recipients to choose their own housing quality and location and can reduce the amount of bureaucracy with which recipients must cope. They are unlikely greatly to alter the relationship between tenants and landlords in the private sector and hence are not likely greatly to change the degree of exploitation which already exists. If housing allowances were accompanied by a relaxed form of rent regulation, however, the increased availability both of alternative housing and the increased ability of tenants to pay for it might somewhat reduce the market power of landlords.

Housing allowances might also be seen as fairer than current policies in dealing with changing family circumstances. For example, a mother may lose eligibility for assistance when her children leave home. Under current policies, a tenant of public housing who loses eligibility because of a change in family circumstances may be required to leave public housing whereas a housing allowance scheme could simply adjust the amount of support being paid.

On the other hand, some of the effects of housing allowances might be viewed as "unfair". Because they are geared to income, housing allowances create an incentive to avoid reporting it. This penalizes honesty.[9] Similarly, by reducing the cost of shelter, housing allowances may affect household formation, typically by causing household to divide. While this might be viewed as fair in the case of overcrowded families, it might not be so viewed if it encouraged single parent households.

Steele (1985, 92) reports evidence from shelter allowances in British Columbia and Manitoba. In B.C.

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[9] While the problem exists now for rent-geared-to-income units, increased participation rates under a housing allowance scheme would exacerbate it.

elderly sharers and couples declined as a fraction of all elderly support recipients and in Manitoba two parent families declined as a fraction of family recipients during the course of the respective programs. Steele emphasizes that this phenomenon could occur for reasons other than household splitting. For example, increases in income might have raised elderly sharers and couples above the cut-off for assistance in B.C. and there may have been an incentive to report common law spouses as roomers in Manitoba.

Finally, while demand side programs such as housing allowances are equitable in the sense of providing assistance to a larger fraction of the target group than do present policies, the amount of assistance for each subsidized household may be less. Although it may seem equitable to some to help many people a little rather than helping a few people a lot, the average level of assistance may be so low that all recipients continue to face significant rent burdens. A policy which leaves most families in difficulty and provides few success stories may not be as satisfying for donors as a policy which can be clearly shown to work in an admittedly small number of cases.

In terms of the "market" view of equity, demand side policies are not inherently inequitable. If they allowed for the relaxation of rent controls which are patently unfair to landlords, equity would be promoted.

In summary, income maintenance and shelter allowance programs have the potential for greatly increasing the equity of rental housing policies, primarily by increasing participation among target groups and reducing the spillover of benefits to others. Rent supplement programs retain the advantage of reducing spillovers but remain inequitable in their uneven treatment of potential recipients.

Production at Least Cost

Demand side policies do not have a direct effect on the costs of production of rental housing. However, they rely more heavily on the private market for the supply of rental housing than do present policies. Since there is some evidence that publicly provided housing is more expensive than comparable housing provided by the private sector, housing allowances would promote least cost production. Moreover, under present policies, subsidized rental housing is provided primarily in new buildings through the non-profit and co-operative housing programs. Under a housing allowance program, recipients would continue to have an incentive to search for low cost housing, presumably in older buildings. This has the double effect of providing accommodation at lower cost and reducing incentives for the demolition and conversion of older buildings.

Respect for Other Social Goals

A provincial wide housing allowance program could significantly reduce the number of households experiencing housing affordability problems. It would be most successful in improving affordability if it did not impose any minimum housing standard as a condition of enrolment. In this form participation rates in excess of 80 percent of the target population might be expected.

Since an unrestricted housing allowance is effectively the same as a general income maintenance scheme, a housing allowance would contribute to the general goal of reducing the misery of lower income groups in approximately the same manner. If a general income maintenance program were politically acceptable, it would be simpler to combine the housing allowance into a universal income maintenance program.

Such a universal income maintenance scheme has been proposed by the MacDonald Commission[10] (1985, ch. 19). This Commission has recommended a Universal Income Security Plan which would replace the majority of federal government income security payments. Specifically the plan would replace the guaranteed income supplement to old age pensions, family allowances, child tax credits and income tax exemptions, married income tax exemptions, federal social assistance payments and federal social housing programs with a single payment delivered monthly and taxed back at a rate of 20% of income over a specified base.[11] (v.2, p.795) This scheme would be self-financing in the sense that no additional tax revenue would be required and no tax savings would be realized. The Commissioners argue that it would be more equitable than the current set of income support programs and that it would at the same time reduce the present disincentives faced by those attempting to "work their way out of the need for benefits" as well as simplifying administration and reducing costs. Finally, it would be more in keeping with the dignity of the recipients, who now face various difficulties in obtaining benefits and may be stigmatized.

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[10] Officially the Royal Commission on the Economic Union and Development Prospects for Canada.

[11] At 1984 price levels the base would be about $3825 per adult and $765 per child, with the first child in a single parent family receiving the higher amount.

The Commissioners stress that such an income maintenance scheme would require the full cooperation of the provincial governments. Roughly one third of the savings from the proposed tax changes would accrue to the provincial governments: the provinces would have to contribute this money to the income support system either by reducing their share of income tax collections or by directly supplementing the federal program.

The effect of the MacDonald Commission's scheme on the affordability of housing has not been reported. It should be noted, however, that the personal disposable income for a family of two adults and two children at the poverty line would rise by from $1200 to $2400 under the MacDonald Commission proposals.[12] This is a payment of the same order of magnitude as that considered under some housing allowance schemes (see Chant, 1985, ch. 7). For a family at the poverty line paying 30% of its net earnings in rent, the payment would reduce the burden to between 26.8 and 28.3 percent of adjusted income. Thus the MacDonald Commission proposals might achieve the essential aims of a housing allowance program.

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[12] Estimated from graphs in MacDonald Commission (1985, v.2, 797-800) for a family with earnings of $20,000 in 1984.

The total cost of the MacDonald Commission proposals is not stated in the report, but the expenditures it is intended to replace amounted to about $40 billion in 1984-85.[13]

A housing allowance scheme providing benefits related to actual rent payments would cost far less than this. Data on the cost of housing allowance programs have been summarized for the Inquiry by Chant (1985, 255-60). He cites studies by Steele (1985) indicating that a housing allowance program for Ontario could be established at a cost of about $100 million annually (at 1980 prices). Such a program would supply 75% of the gap between actual rent paid and 30 percent of income, with a maximum rent equal to the 33rd percentile of rents in large Ontario urban areas. Her estimates ignore any induced increase in the demand for housing. Chant also cites an estimate by Clayton (1984) that the cost of a similar program for Canada as a whole would range from $600 to $700 million. Finally we note that Chant himself estimates that an expenditure of $200 million annually could provide 80% of those households with incomes below 150% of the poverty line[14] with a rent supplement

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13. Calculated from Table 19-1, MacDonald Commission (1985, v.2, 772).
14. Defined as the revised low income cutoff line used by Statistics Canada.

equal to 93% of the average gap between average rent and 25% of income.

Faced with this level of uncertainty, it is perhaps best to keep in mind two or three rough figures. Expressed in 1984 dollars, the average gap between actual rent and 25% of gross income is estimated to be around $1900.[15] The average gap between actual rent and 30 percent of income must be about $1,000 less, or about $900. There are somewhat fewer than 200,000 households in core housing need in Ontario. (see Tables 2.18 to 2.20) Consequently a program which eliminated the gap between actual rent and 30% of income for all households in core housing need must cost of the order of $180 million dollars per year.[16] Steele's estimates demonstrate that restrictions on eligibility and on the maximum rent payable would significantly reduce this figure.

To place this figure in perspective, recall that total federal and provincial expenditures to assist rental housing in Canada are estimated to be of the order of $1.5 billion (Table 2.27). Ontario's share of these, based on population alone, would be about $540 million. Thus a housing allowance program would almost certainly be less expensive than the current package of rental housing policies pursued by provincial and federal governments.

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[15] Miron and Cullingworth (1983,127) updated by the Consumer Price index. Compare Chant's (1985, 7-15) estimate of $1768 at 1983 prices or $1845 at 1984 prices. For a household with an annual income of $20,000, the gap between rent and 30% of income is $1,000 less than the gap between rent and 25% of income.

[16] 200,000 recipients times $1750 average grant.

Expenditures under a rent supplement program can be limited by specifying a maximum number of rent-geared-to-income units. Consequently, they are easier to control and this may increase the attractiveness of rent supplement policies. The cost per RGI unit remains high. CMHC (1983, 306) concluded that the present value of costs per rent supplement unit lay between those of private non-profit and co-operative housing programs when all three were evaluated using real interest rates of about 5%. For all three programs the present value of costs per RGI unit was about $100,000. If, as suggested above, private landlords are able to deliver housing services more cheaply than public landlords, this calculation may overstate the relative cost of rent supplements.

C. Supply Side Policies: Subsidies

Supply side policies are those whose initial effect is on the suppliers of housing services rather than the consumers. Chant (1985) and others distinguish supply side policies which augment the private market, such as subsidies to private landlords, from those which partially replace the private market, such as the direct provision of public housing. In this section we consider the former. Direct provision of housing services by government or non-profit agencies will be considered in section D.

Supply side programs have been very prominent at both the federal and provincial levels. Chant (1985, ch. 5) considers three types: accelerated depreciation of rental housing, special tax treatment as exemplified by the multiple unit residential building (MURB) program, and directed subsidies such as the rent supplement program.[17] Many others could be mentioned. Capital grants to builders who are willing to accept certain conditions rents or tenants have been particularly important. For example, the federal Limited Dividend, Assisted Rental and CRSP (Canadian Rental Supply) Programs all provided favorable financing for entrepreneurs willing to make some portion of their units available to low income tenants. Limited Dividend housing required the acceptance of rent controls, Assisted Rental imposed ceiling price requirements, and the CRSP program required landlords to allocate a certain fraction of their units to rent supplement tenants. Other programs have attempted to address the cash flow problems encountered by private developers in times of high inflation. For example, the Graduated Mortgage Program provided special loans which could be used to reduce the payments during the early years of a mortgage. A recent paper by Bossons (1985) has recommended the use of indexed, mortgage backed securities to finance non-profit co-operatives and the federal government has indicated an interest in such schemes.[18] Under them, government guaranteed mortgages would be pooled to provide backing for securities denominated in real (inflation-adjusted) interest rates. The cost to the government would be limited to the contingent liabilities generated by its mortgage guarantee. Finally Barnard (1985) considers rehabilitation loans and property tax rebate schemes which would reduce the opportunity cost of supplying rental housing from older stock. All these schemes attempt to influence the outcome of the rental housing market by influencing the incentives faced by developers and landlords.

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[17] In this study, rent supplement programs have been classified as demand side programs.

[18] McKnight (1985, 3).

While Chant's discussion of supply side schemes is not easily summarized, he makes the following important points.

First, the initial (or proximate) beneficiary of a subsidy program must be carefully distinguished from the ultimate beneficiary. Most supply side programs initially provide benefits to landlords or developers, but the ultimate benefits may go partly or wholly to tenants.

Second, short-term supply side programs should be distinguished from longer term programs. Off-again on-again programs such as the MURB program can influence the volume of residential construction but cannot permanently change either the rent or the supply of rental housing.

Thirdly, the number of new units supplied under any supply side program should not be considered a net addition to the rental housing stock, because these units may displace others which might have been added to the housing stock anyway.

Finally, tax incentives are an expensive way of increasing the stock of new housing. Even under favourable conditions, the tax cost per additional unit can be a large fraction of the total cost of the unit (p. 293 and Table 5.7).

This report is in substantial agreement with Chant's comments on supply side policies. Consequently, this section will be confined to a brief restatement and extension of his analysis in the framework adopted in the present report. As in section B, we will begin by reviewing how the main supply side policies affect the outcome of the rental housing market. We will then consider how effective supply side policies may be in achieving rental housing policy objectives.

1. Theory and Evidence

Supply side policies operate by reducing the cost incurred by landlords in supplying housing services. It should be remembered that they do not reduce the total cost of providing housing services, since the policies must be financed by increased taxes or diverted public expenditures. The loss of goods and services otherwise available to taxpayers must be counted as part of the real cost of providing housing services.

The landlords' cost may be reduced by subsidizing either their capital or operating expenses. Capital costs can be reduced by special tax treatment, such as accelerated depreciation allowances and rules which allow accounting losses on residential buildings to be deducted from other income. Smith (1977)[19] has argued that the Income Tax changes in 1971 significantly reduced the attractiveness of real estate investment relative to other investments. The MURB program temporarily offset some of these disadvantages. Both policy changes affected the capital cost of providing rental housing.

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[19] See Chant (1985, 271) for discussion.

It is also possible to subsidize the operating costs of landlords by providing an annual grant or special tax treatment. Such policies have not been frequently used, except for the federal governments' rent supplement program which paid the difference between market and geared-to-income rents on specifically designated units directly to landlords. This program should really be considered a demand side program, however, since it lowers the price of housing to the tenant while in principle leaving the landlord's revenue unchanged. In fact, many of the federal government's housing policies have offered landlords a capital subsidy on new construction in return for accepting lower rental revenues. This amounts to taxing operating costs while subsidizing capital costs.

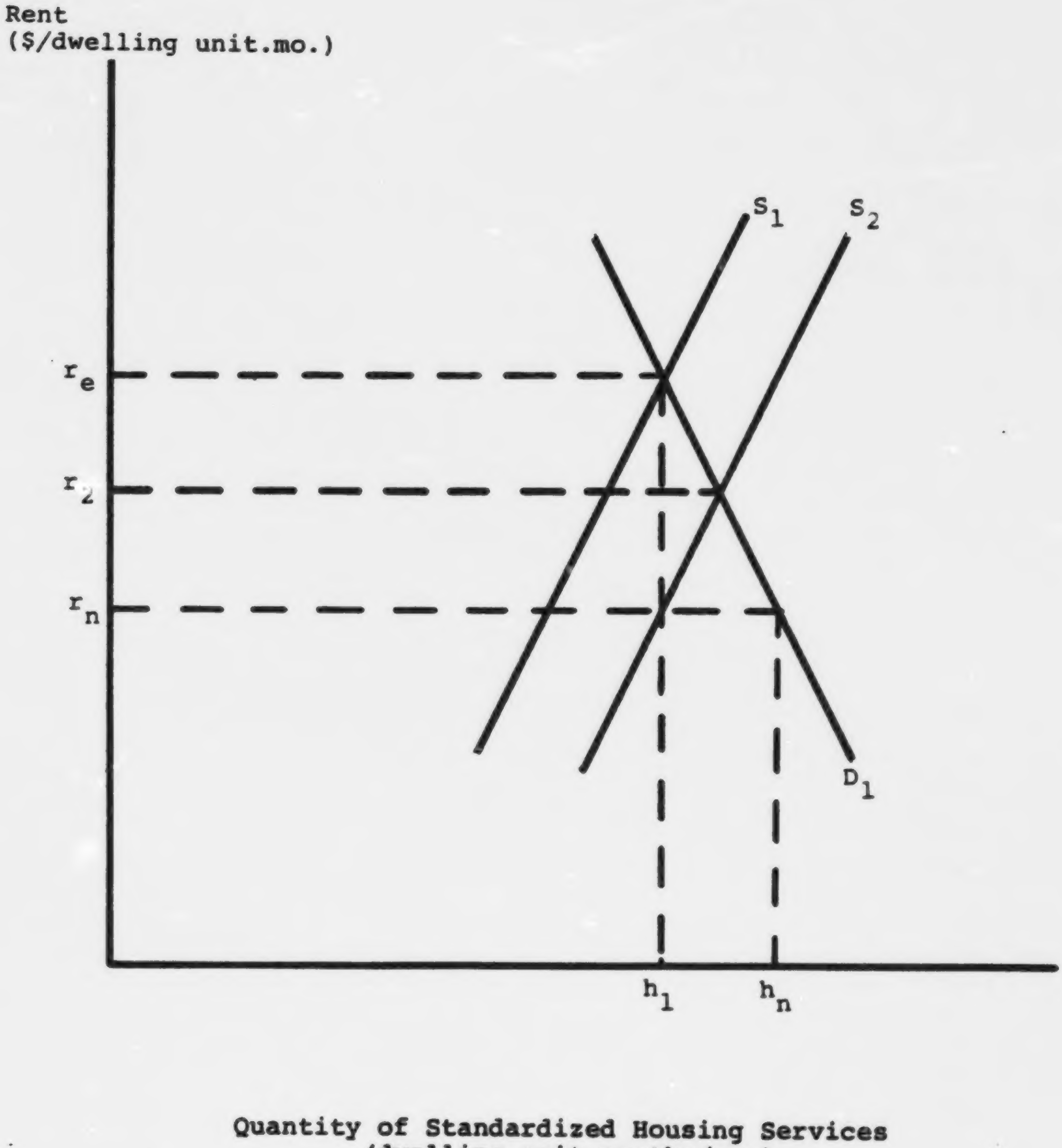
All supply side programs operate by affecting the economic rent required to induce new construction or to maintain existing housing in the rental stock. Figure 5C.1 shows the effect of a subsidy program in the absence of rent control. Our point of departure is a market in long run equilibrium with economic rent r_e and housing supply h_1. A supply side policy reduces the economic rent to r_n. If the policy applies only to new construction, the short run supply of housing services will not be affected. If it is an operating cost subsidy applying to all existing housing, the short run supply curve will shift down to SRS_2. In this case the rent paid by tenants would decline by a small amount to r_2 and most of the benefit would be captured by the landlords.

The key effect of most supply side policies is to induce new construction. Since above normal profits can now be made by providing housing services, landlords have an incentive to construct or purchase new buildings. As short run supply curve gradually shifts out the rent falls until it reaches r_n, where h_n units of housing service are supplied. Of course if the increase in housing provided is so great as to drive up the price of land, the final equilibrium will be at a slightly higher rent.

Several important conclusions can be drawn from this analysis. The first is that supply side policies improve consumers' welfare only through a decline in general rent levels. Accordingly it is difficult to restrict the benefits to a particular group of recipients. Secondly, the benefits of supply side policies accrue to consumers only after sufficient time has elapsed for the supply of housing to adjust. This may be a matter of several years, during which a substantial portion of the subsidy accrues to the owners of new housing, which rents for more than necessary to induce its supply.

FIGURE 5C.1

SUPPLY SIDE SUBSIDIES
WITHOUT RENT CONTROL



A third conclusion is that short-term supply side policies cannot permanently affect the outcome of the rental housing market. While a supply side policy is in effect, rents will begin to approach the new, subsidized level, r_n. But as soon as the policy is ended, the economic rent returns to its original level. Market rents will be too low to encourage new construction. Rents will begin to increase once more.

A more subtle conclusion is that many supply side policies do not promote conservation of the housing stock and may in fact discourage it. The main benefits of accelerated depreciation and tax write-offs occur during the early years of a housing project, when cash flows are low or negative. They do not improve the position of an older building occupying land with a high opportunity cost. Indeed, if the supply side policy succeeds in driving down the general rent level, the revenues derived from older buildings will decline. This will encourage demolition or conversion to other uses.[20]

Finally, a supply side policy will always be an expensive way to permanently increase the housing supply. We noted above that for a permanent effect, the policy must be continually applied. As older buildings are demolished and converted they are replaced by new dwellings built with the help of the subsidy. Eventually, the subsidy must apply to the entire housing stock, even that which would have been built if the subsidy did not exist.

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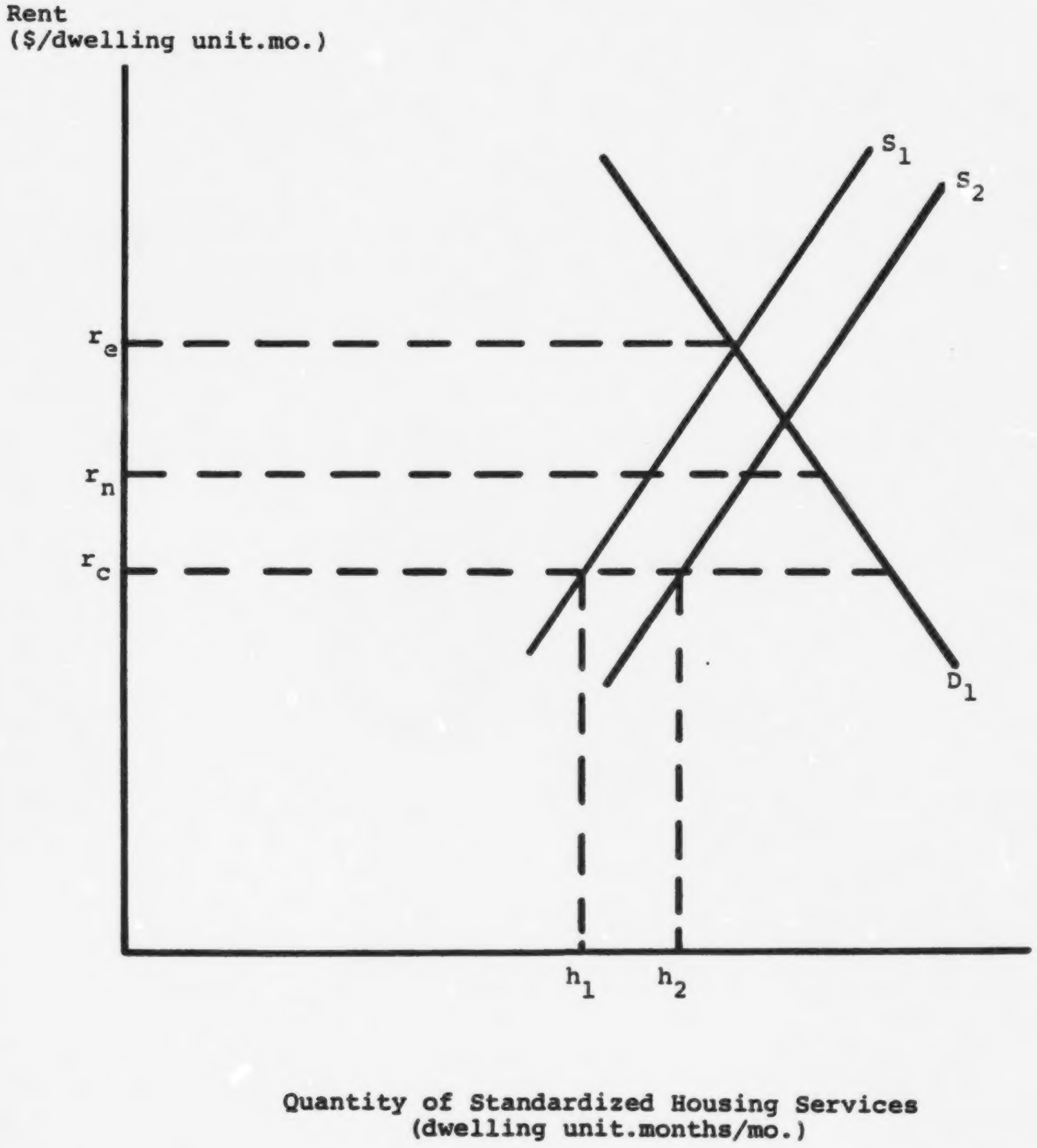
[20] 20. This point does not hold for supply side policies, such as property tax reductions, which might increase the return to holding older buildings.

The effect of a supply side policy will be different under a binding system of rent controls. Figure 5C.2 illustrates the one possible outcome. A subsidy applicable to all existing rental housing has shifted the supply curve down from SRS_1 to SRS_2. In the short run there is an increase in services provided by the existing stock (from h_1 to h_2). However the controlled rent is still below the economic rent, and there is no incentive to new construction. Pressure to demolish the existing stock remains. A supply side policy which applied only to new construction would have no effect at all. Of course, it might be possible to subsidize new construction so heavily that it was profitable even at the expected controlled rents. In this case, the analysis of Figure 5C.1 would apply.

To summarize, supply side policies act by affecting the profitabilty of supplying housing services. Most policies are directed at new construction. Because of the lags in adjustment it may take some time for supply policies to benefit tenants, and it will always be difficult to restrict the benefits to selected groups. Supply side policies may have a perverse effect in displacing some of the existing stock of housing.

FIGURE 5C.2

SUPPLY SIDE SUBSIDIES
WITH RENT CONTROL



2. Effect on Rental Housing Objectives

The preceding analysis indicates that supply side policies will not be very useful tools in achieving rental policy objectives. Nevertheless they are among the most popular of government housing policies. This probably indicates that governments have been concerned with objectives other than those we have identified. The most obvious of these is the promotion of new residential construction as a device to stimulate the economy.[21] In this subsection, however, we will consider only the rental policy objectives identified in earlier chapters.

Availability

Supply side policies which apply only to new construction cannot increase the availability of housing unless they are so extensive as to reduce the economic rent to the controlled level. If they are so extensive, they will induce an increase in the construction of new rental housing which will eventually eliminate the excess demand which is causing our presently very low vacancy rates. Supply side policies affecting existing buildings, such as a grant to reduce operating costs, would induce some increase in the housing services provided by the existing stock and would reduce incentives for demolition. However most observers agree that the short run supply of housing services is quite inelastic, so rents would not fall significantly and the main effect would be to increase landlords' revenues. In general then, supply side policies are an ineffective instrument for improving the availability of housing under a system of binding rent controls.

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[21] Rose (1980, ch. 3) argues that maintaining employment has been a central objective of Canadian housing policy since the early 1940's.

Under a revised system of rent regulation, such as rent arbitration, which allowed most rents to be established at the market level, there would be no serious problem of availability, in the sense that normal vacancy levels would be reestablished. A permanent supply side policy which reduced the economic rent would increase the total supply of housing services after a significant adjustment lag. The total increase would depend on the price elasticity of demand for housing services. Since the price elasticity is estimated to be fairly low, an increase of 5% in the rental housing stock might require a reduction of economic rent by 10% or more and since capital costs are but a fraction (say one half) of total costs, the required capital cost subsidy could be of the order of 20% or more of the capital cost of building and land. The negative effect of lower rents on the conservation of the housing stock would still be of concern.

Affordability

Under the current system of rent regulation, the prevailing level of rents would not be significantly affected by most supply side policies affecting new construction unless, of course, the subsidy reduced the economic rent below the controlled level. Consequently, reasonable supply side policies would do little to improve affordability of rental housing under present circumstances.

Under rent arbitration or a similar form of rent regulation, supply side policies could reduce the general level of rents. This would improve affordability, which of course would have suffered in moving away from the present system of rent control.

Rent Gouging

Effective supply side programs lead eventually to lower rents. While the housing stock is increasing and rents are falling, the probability of generalized rent gouging is obviously low. Since vacancy rates will tend to be high when rents are falling, the probability of individual rent gouging is also reduced during the adjustment period. Thus an effective supply side program might reduce the possibility of rent gouging during the transition to a less restrictive form of rent control.

Security of Tenure

Supply side programs do not affect the contract between landlord and tenant. Under a binding system of rent control, supply side programs may reduce the excess demand for rental housing, but the effect is slight unless the subsidies are extremely large. Security from unreasonable eviction is certainly not reduced and may be marginally improved. Under a regime of rent arbitration, security of tenure would be largely unaffected by supply side polices, since the legal position of the tenant is unchanged and the excess demand fror rental housing would be much reduced.

To the extent that supply side policies encourage earlier demolition of existing housing, however, the threat of losing one's rented premises to demolition or conversion is increased. Overall, supply side policies are likely to have a neglible effect on security of tenure.

Social Diversity

Supply side policies do not directly affect the social composition of the tenant population. Since it is difficult to assign the newly supplied housing to specific groups, the supply side policies can operate on the ethnic and income mix only by keeping the general rent level below what it would otherwise be. Little evidence is available on the effect of rent levels on the locational choice of the various income and ethnic groups. It may be said that subsidy-type supply side policies are essentially neutral in their social effects relative to no explict policy at all. This is in contrast to demand side measures and supply side measures which provide housing services directly. In both cases, the income mix of residential developments can be manipulated to some degree.

Equity

Supply side programs are inherently less vertically equitable than demand side programs because they operate primarily through the general level of rents. Their benefits (if any) thus extend to all tenants, not just the lower income ones who are in particular need. Moreover, we have seen that the proximate beneficiaries of supply side policies are usually landlords, who are not usually considered to have housing problems. While it is true that in the long run a much larger share of the benefits will accrue to tenants, the landlords may obtain significant transitory gains.

Compared to no program at all, however, supply side subsidies may aid lower income groups proportionally more than upper income groups, since the latter spend a lower fraction of their income on housing (Chant, 285).

Because they operate on the general rent level, however, supply side policies tend to affect renters equally. They do not introduce the kinds of horizontal inequities exemplified by long waiting lists for public housing. Similarly, there is no danger that minimum housing quality standards will exclude a significant number of renters: participation rates are 100 per cent.

Finally supply side subsidies, like demand side subsidies, do not violate the market view of justice in the flagrant way that rent controls do. While they may hold rents below the level expected by entrepreneurs who undertook to provide rental housing before the announcement of the policy, the intervention is not as directly and clearly prejudicial to their interests as is the direct limitation of the right to collect market rents.

To summarize, supply side policies score highly on horizontal equity to tenants, but poorly on vertical equity. Transitory subsidies on new rental construction are horizontally inequitable to landlords.

Production at Least Cost

Supply side subsidies tend to distort housing production decisions in the direction of new construction. Moreover, some authors have implied that the generous treatment accorded some "soft costs"[22] under the MURB program led to excessive write offs for these purposes. Unless the claims were absolutely fraudulent, which no one suggests, this implies that significant resources were used in the soft cost areas which might not have been employed normally. Unfortunately, no estimates of the increase in the total cost of rental housing due to this effect are available.

Compared to demand side programs or no program at all, therefore, supply side programs probably raise the full cost of housing services. Compared with the direct provision of new public housing, however, the cost increase is probably low.

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[22] Such as landscaping and administration. See Chant (1985, 273).

Respect for Other Social Goals

Because the aggregate demand for housing services is not very responsive to price, a relatively small increase in the stock of housing is likely to produce a substantial reduction in rents and home ownership costs. For this reason a subsidy on new housing construction may appear to be an attractive and economical way of reducing the general rent level. This impression is misleading because the demand for rental housing responds more to price than does the demand for housing services as a whole, and because the subsidy cannot be confined to the required net increase in the housing stock.

To illustrate the problem, consider a plan to reduce the general rent level by $1000 per year (roughly equal to the rent gap identified in our earlier discussion of demand side policies). Suppose that the average economic rent is $600 per month, or $7200 per year. We must therefore reduce rents by about 14%. If the elasticity of demand is 0.5, this requires increasing the housing stock by about 7%. If the supply of housing is perfectly elastic in the long run, the cost of the program will be an annual subsidy of $1000 on 7% of the housing stock. There will be approximately 1.2 million tenant households in Ontario in 1986. Thus the total cost of a supply side program seems to be only 84 million dollars per year.[23] This calculation seems to indicate that average rents could be reduced by an amount equal to the average "rent gap" at a cost comparable to that of a housing allowance. This is a false impression. First, note that our example relates to an environment without rent controls. If rent controls are binding, additional new units equal to the excess demand for rental housing must be supplied before rents will begin to fall.

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[23] $1000/unit x (.07x1,200,000 units) = $84,000,000

Secondly, notice that we have assumed that the elasticity of demand for rental housing equals that of housing services as a whole. But, as Chant (1985, ch.7, 41-43) notes, a reduction of rents of this magnitude would induce a signi-ficant substitution of rental for owned housing. This effect could double the required subsidy.[24]

Thirdly, our example has assumed that the stock of rental housing can be expanded with no increase in average rents. If this is not true, the required unit subsidy will be higher.

Finally, note that a permanent reduction in rents requires a permanent subsidy program and that the lower general rent level tends to promote demolition and conversion of existing stocks. Thus the subsidy must gradually be applied to an ever increasing fraction of the housing stock. If losses amount to as little as 2% per year of the rental stock per year, annual subsidies to the

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[24] Table 3.4 shows that the price elasticy of tenure choice varies with demographic characteristics. Assuming an overall elasticity of .5, a 14% decline in rents would increase the proportion of tenants in Ontario from .40 to .43. This represents roughly 84,000 extra rental households, the subsidy on which would be about $84 million.

replacement units would amount to about $240 million after 10 years.[25] These objections are not overcome if the subsidy program applies only to specified types of housing designed to appeal only to lower income tenants. While the number of target households would be less, the elasticity of demand for the units would be much higher as higher income tenants substituted subsidized space for other quality characteristics (Chant, ch. 7, 42). Lower average rents on low income housing would encourage landlords of such accommodation to convert their buildings to appeal to different market segments and the subsidy would have to be applied to an ever increasing fraction of the low rental stock.

Thus a given goal, such as the reduction of rent for low income households, is more expensive to attain (as well as less certainly achieved) by supply side policies than by demand side policies. This conclusion is reached primarily on theoretical grounds. However, we do know that the supply side programs undertaken in the past have proven very expensive. For example, estimates of the revenues forgone by the federal and provincial governments during the operation of the MURB program have been estimated to be as high as $1.3 billion for 195,000 starts (Andersen, 1984, and Chant, 1985, Table 5.8). This amounts to a capital grant of about $6700 per unit and an annual cost of about 130 million per year.[26] Expenditures of this magnitude do not seem to

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25. $1000/unit on 20% of a stock of 1.2 million rental units.
26. Assuming a 10% real discount rate.

have solved the affordability and availability problems documented in chapter 2.

In summary, our discussion of supply side policies indicates that they are slower to act, less certain in their effect and probably more expensive than demand side policies designed to achieve the same improvements in affordability. Neither group of policies will work effectively to improve availability in an environment of binding rent controls. Recalling the three most pressing rental housing problems identified in Chapter IV (availability, affordability and respect for other social goals) we must conclude that none are adequately addressed by supply side policies in a rent-controlled environment. As suggested earlier, it appears that their real popularity derives from quite different considerations, namely their use as a device to affect the overall level of economic activity and employment in the economy.

D. Supply Side Policies: Direct Provision

Historically, the most common response to the problem of affordabilty of rental housing has been for the state to directly provide accommodation geared to tenants with low incomes or other special needs. In Ontario, the most important programs of this nature have been the Public Housing program, in effect until the late 1960's, and the section 56.1 programs (Non-profit and Co-operative Housing) under the NHA. The latter have been in operation since the late 1970's. The euphemism most often applied to both programs is "socially assisted housing" but this is also applied to housing supplied through the subsidy programs discussed in the previous section. In this study, the term "public housing" will be used to refer to both programs.

Public housing programs may be considered supply side programs because they increase the stock of rental housing, but they differ from the supply side programs discussed in section 5C in providing the additional housing stock directly rather than relying upon profit oriented entrepreneurs. The effects of these programs on rental housing objectives can vary widely depending on the features of the individual programs. The most important differences among programs lie in the extent of income integration among tenants and in their reliance on new additions to the housing stock.

In this section we will briefly review the main features of the major public housing programs found in Ontario. We then turn to a formal analysis of their effects on the level of rents and the quantity of housing services consumed. Finally, we assess merits of these programs in achieving rental housing policy objectives.

1. Program Description

The development of Canadian housing policy since World War II has been well reviewed by Rose (1980) and summarized for the Inquiry by Adams, Ing and Pringle (1985, section 4). With respect to the housing problems of the poor, three main approaches may be discerned. The first was to provide low cost housing in large multiple unit developments designed and constructed for the purpose. Important examples were the Regent Park, Lawrence Heights and Warden Woods projects in Toronto (Rose, 1980,31-32). All of the units in these projects were offered to low income tenants on a rent geared to income basis. Construction of these units in Ontario was accelerated after 1964 by changes in the National Housing Act which encouraged the provinces to initiate and administer public housing programs financed by heavy federal subsidies of up to 90% of the capital cost and 50% of operating costs. (Rose, 1980, 38-40). This legislative change coincided with the formation of the Ontario Housing Corporation (OHC). The OHC pursued the objective of social housing so vigorously that by 1969-70 its projects accounted for almost 98 percent of the federal budget for assistance to public housing. (Rose, 1980, 69). By 1971 the OHC held a portfolio of about 40,000 units.[27] By 1976 it had reached 75,000. (Table 2.7)

These projects generated bitter criticism from tenant groups and property owners alike. (See Rose, 1980, 31-32, Adams, Ing and Pringle, 1985, 181). Residents of areas slated for redevelopment objected to being characterized as slum dwellers. Selection of tenants on the basis of need meant the presence of many families with severe social problems. Tenants resented being treated as welfare recipients and residents of the surrounding community resented the intrusion of large numbers of problem families (Lewis and Rice, 1985, 2). Municipal politicians blamed the developments for generating demands for expensive social programs and not generating any tax revenue. Political resistance to further public housing became almost universal.

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[27] About 34,000 of these were for families. Rose (1980, 105).

The second approach was to deemphasize public housing for low income families in favour of assisting lower income families to purchase their own homes. The federal Assisted Home Ownership Program (AHOP) supplemented by the provincial Home Ownership Made Easy (HOME) program provided capital grants, and high ratio graduated payment mortgages to encourage home ownership. Unfortunately, these measures were of little assistance to the most needy and, in any case, encountered severe difficulties when inflation in house prices failed to keep up with expectations.

The final approach was to attempt to provide assistance to low income tenants while still integrating them with the remainder of the community. This assistance took two forms. On the one hand subsidies were granted to private entrepreneurs who would accept rent controls on some or all newly constructed units (the limited dividend and rent supplement programs) while on the other the direct delivery of public housing was transformed completely with the revision of programs to promote non-profit and co-operative housing projects.

The non-profit and co-operative housing programs provide subsidized housing by reducing to 2 percent the effective rate of interest on mortagages undertaken for the construction of rental housing. The housing is variously constructed by municipal agencies, private non-profit groups or private cooperatives. In all cases, the subsidy money is first applied to reduce the rent from the economic rent which would fully cover costs to a reduced level termed the "lower end of the market". Any subsidy money remaining is then used to provide rent geared to income accommodation for low income tenants. Not more than 35% of units in family oriented buildings (and not more than 50% of units in senior citizen buildings) can be allocated to such subsidized tenants.

Most section 56.1 housing projects involve the construction of new housing. However, some projects have purchased existing housing. In Hamilton, for example, the East Kiwanis Homes project has purchased existing houses, often vacant or needing substantial repair, and renovated them for a total cost much lower than that of constructing new units. More of the units can be targeted for low income families since the problem of social integration is met by dispersing the project houses throughout appropriate areas of the city. Rice and Lewis (1984) show that this project has been very cost effective and extraordinarily successful in eliciting tenant satisfaction and neighbourhood support. Similarly, the Mayor's Task Force on Housing for the City of Ottawa (1985) has recommended that the City concentrate on the purchase of existing rental stock for the delivery of social housing programs.

To summarize, Ontario has had considerable experience in providing low income housing directly to tenants. The effects of these programs depend critically on two characteristics: the degree of income and social integration within projects and the choice between new construction or purchase of existing housing.

2. Effect on Rents and Housing Stock

In analysing the effects of public housing schemes on the market for rental housing, the key question is how much private sector housing is displaced the direct provision of public housing. Chant (1985, 204-205) claims that when the long run supply of rental housing is perfectly elastic (i.e. the economic rent is constant as we have assumed in most of our discussion), the ultimate effect of public housing is to displace private housing on a one for one basis. Even in the short run, builders may reduce their supply of new units in anticipation of public housing projects. We shall see that this argument requires some qualification. In addition we must analyse the direct provision of public housing services by purchase of existing stock.

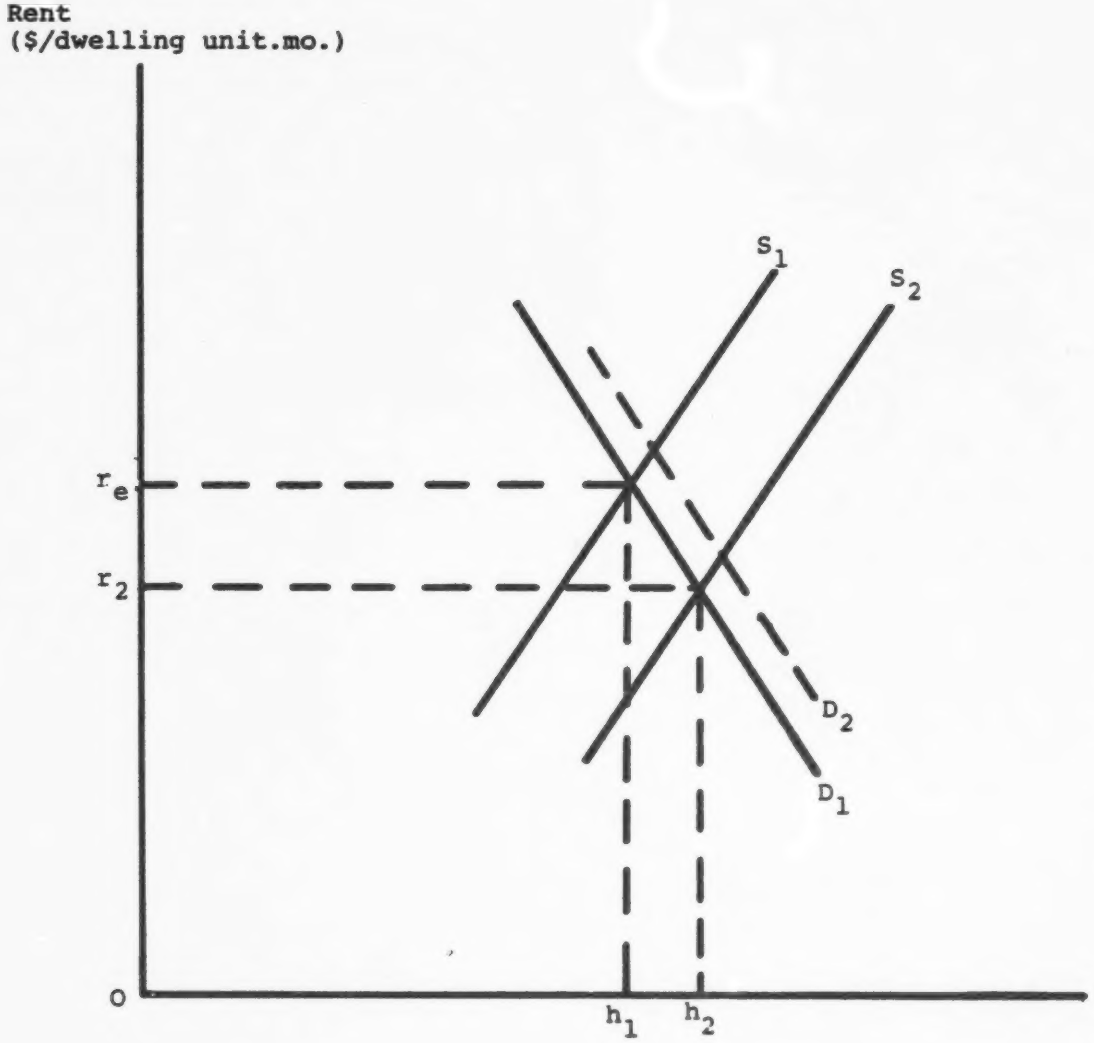
Consider first public housing programs which construct new housing. Figure 5D.1 illustrates their effect in the absence of binding rent controls. As usual, the reference point is a long run equilibrium rent of r_e and a supply of h_1 units of housing services. The initial effect of a public housing program is to shift the short run supply curve rightwards, supplying (h_p - h_1) additional units of housing services to the market. As a result rents will be depressed to r_2, some of the services provided by the existing housing stock will be withdrawn, and the general rent level will fall. The result is that housing services increase by only $h_2 - h_1$ units, rather than $h_p - h_1$ units. Some of the public housing has displaced privately supplied accommodation.

In the long run, the lower level of rents will encourage demolition and conversion of the existing stock. As this occurs the short run supply curve shifts back to SRS_1 and the rent returns to the original level.

The foregoing analysis ignores the fact that the aggregate demand for housing will have increased because some families will be consuming housing services at subsidized rents. The effect is analogous to that noted by Fallis and Smith (1985) in their analysis of rent controls with exemptions. In fact, the provision of rent-geared-to-income units has the effect of a demand side subsidy directed exclusively towards tenants of the designated units. As a result, the market demand for housing services, D_1 shifts outwards to D_2. This suggests that the short run equilibrium will exhibit a smaller decline in rents and less displacement of existing housing services than indicated earlier. In the long run, rents will return to r_e but the total quantity of housing services supplied will exceed h_1.

FIGURE 5D.1

PUBLIC HOUSING
WITHOUT RENT CONTROL



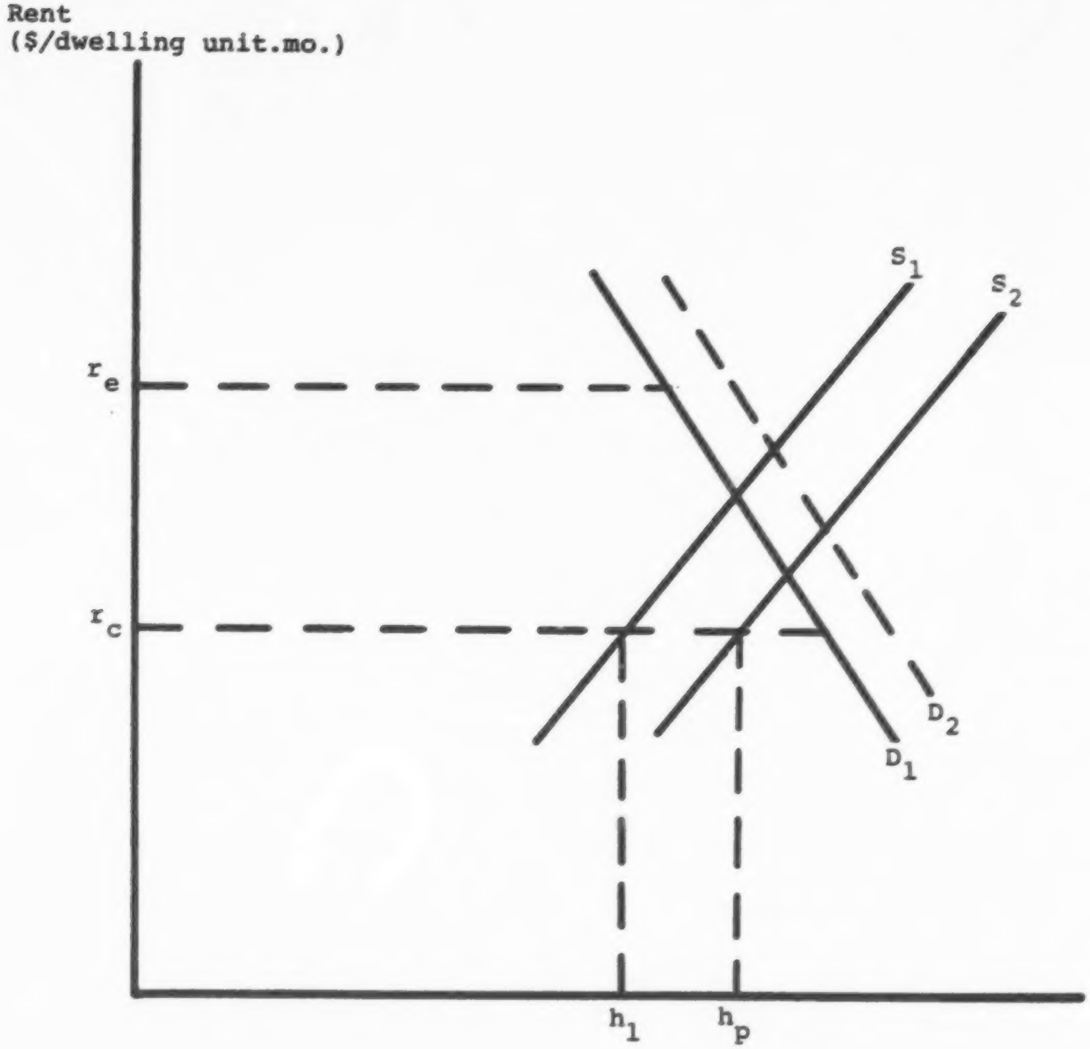
Quantity of Standardized Housing Services
(dwelling unit.months/mo.)

Figure 5D.2 illustrates the effect of public housing policies under a binding system of rent controls. Before the policy is implemented, h_1 units of housing services are supplied at the controlled rent r_c. There is excess demand for housing and the existing stock is gradually being withdrawn from the market. If public housing in the amount of $h_p - h_1$ is supplied directly to the market, the short run supply curve shifts rightwards to SRS_2. Since the prevailing level of rents does not change, there is no immediate displacement of services from the private stock. The excess demand for housing is reduced somewhat, consequently availability is improved. But the incentive to withdraw private stock from the rental market remains, and consequently the short run supply curve will once again begin to shift leftwards, reestablishing the excess demand for housing.

As before, the above account ignores the increase in demand for housing services induced by the subsidy aspect of public housing. This effect shifts the demand for housing services rightwards to D_2. Rents are not affected, but the increase in demand offsets some of the reduction in availability problems that would otherwise have been achieved.

FIGURE 5D.2

PUBLIC HOUSING
WITH RENT CONTROL



Quantity of Standardized Housing Services
(dwelling unit.months/mo.)

To summarize, when rent controls are absent the direct provision of public housing by new construction tends to displace private sector supply. The displacement effect increases over time but never completely offsets the increment to the housing stock because the rent subsidies implicit in public housing programs increase the demand for housing services. When rent controls are present, the provision of public housing can partially offset the gradual decline in the private rental stock. In both cases, public housing can raise the housing services consumed by target groups.

The effect of public housing directly provided from the existing stock differs somewhat from the preceding case. In brief, the provision of geared to income housing from the existing stock tends to increase the demand for housing services while not immediately increasing the supply. This drives up the general level of rents, encourages conservaion and renovation, and tends to induce new private sector supplies. Of course the effect depends largely on the presence or absence of rent controls.

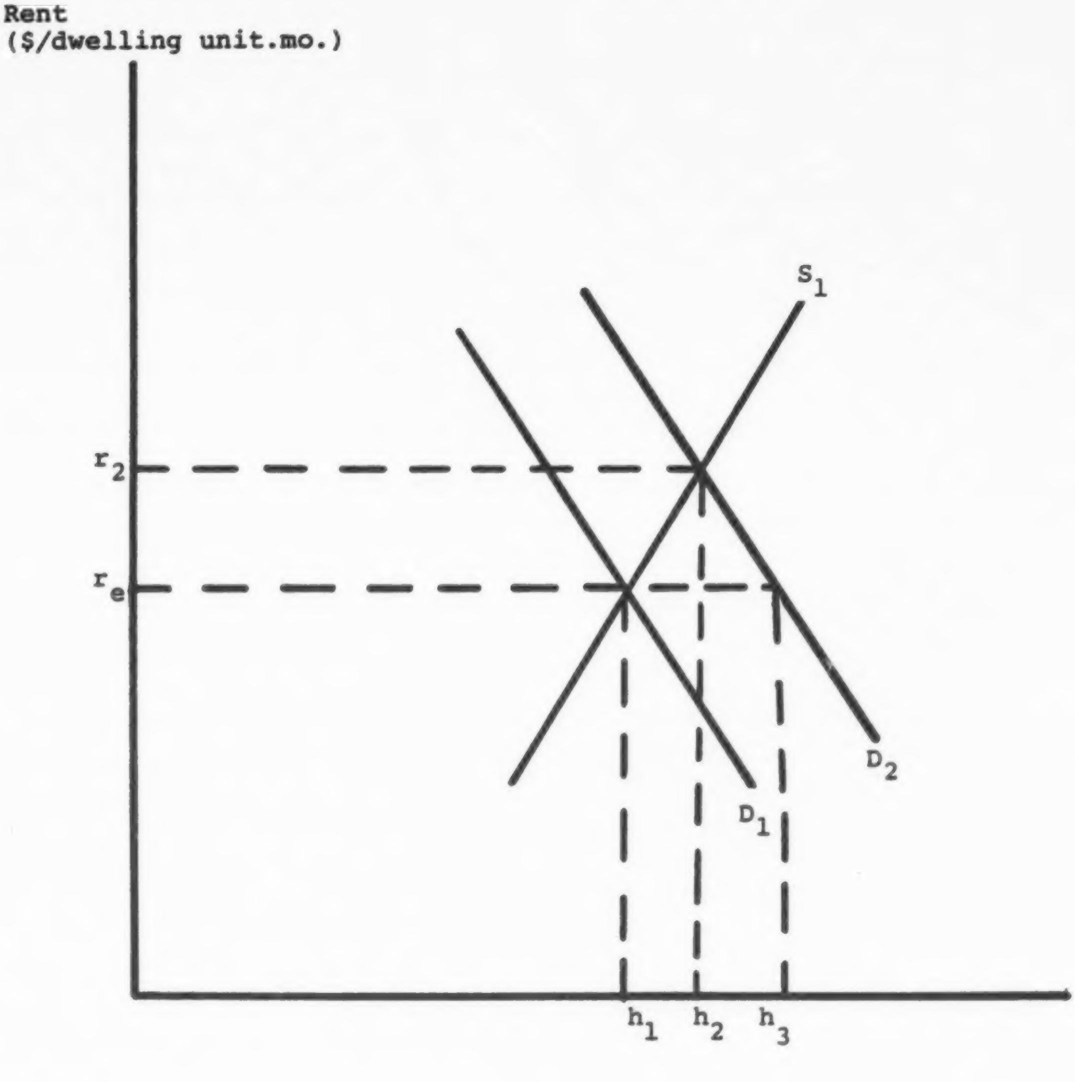
Two cases may be distinguished. Either the existing stock which has been purchased was formerly rented or else it was owner occupied or vacant.

Figure 5D.3 illustrates the case of publicly provided housing from the existing rental stock in the absence of rent control. The rent geared to income aspect of the program shifts the demand for housing services to D_2. If the housing is not renovated, the short run supply curve remains unchanged. (If the housing is renovated, there has been an increase in the housing stock which acts to offset some of the following effects). In the short run rents rise to r_2, and the total supply of housing services expands to h_2. This increase in the provision of housing services is called forth by the increase in the general rent level. In the long run, higher rents discourage demolition and encourage new construction. The short run supply curve shifts to the right and the long run equilibrium rent r_e is reestablished.

In the presence of a binding system of rent control, the provision of public housing from the existing stock has quite a different effect. In Figure 5D.4 the initial position is illustrated by a supply of h_1 units of housing services at the controlled rent r_c. A public housing program based on purchase of the existing rental stock shifts the demand curve to D_2. The excess demand for housing services increases but the rent remains at the controlled level. The supply of housing from the private sector is not increased and availability worsens. The long run incentive to reduce the private housing stock remains. Because public housing can be assigned selectively to specific target groups the fraction of these groups which succeeds in obtaining housing will probably increase but this will be offset by an increase in members of other groups who are forced out of the rental market.

FIGURE 5D.3

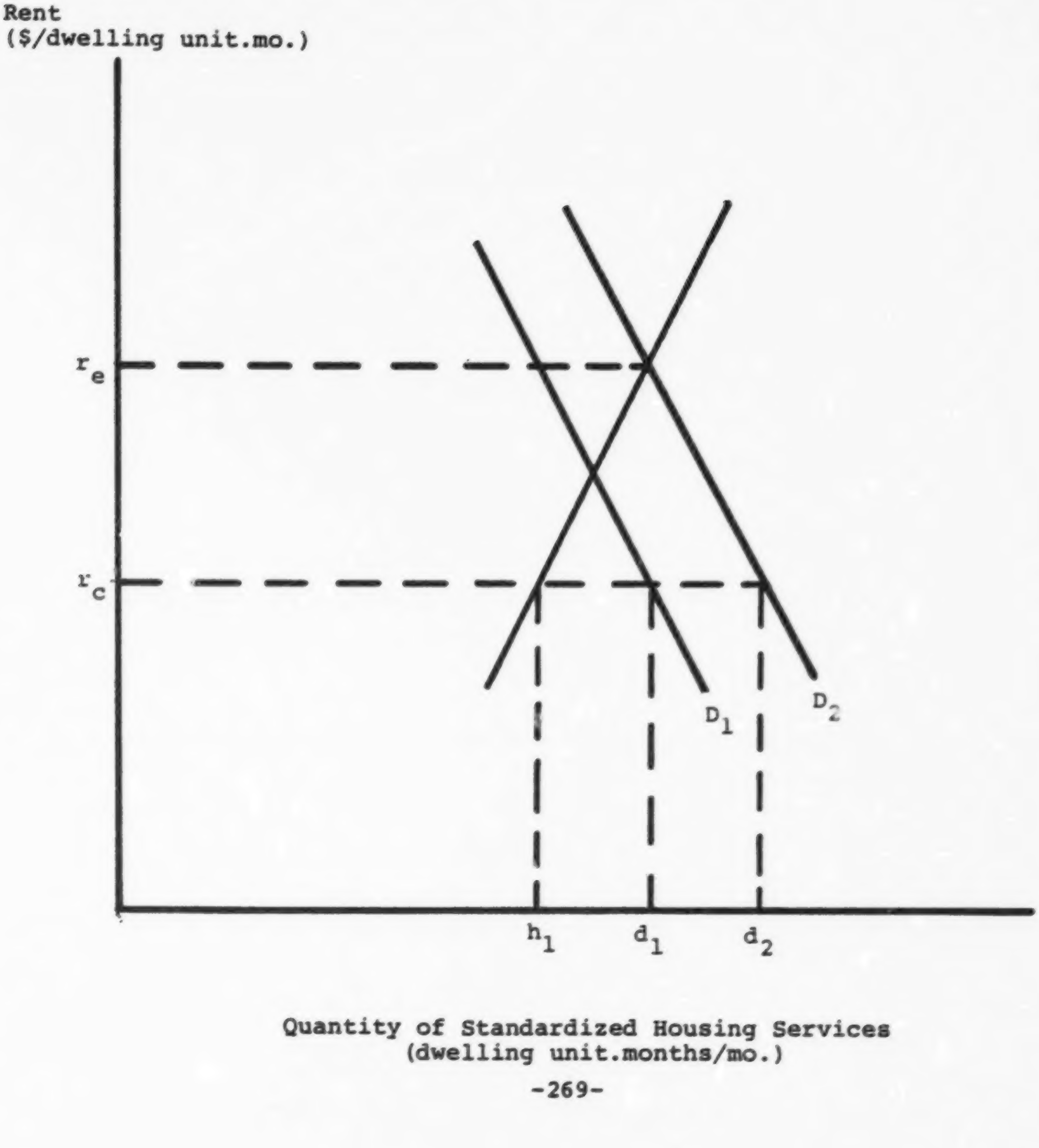
DIRECT PROVISION FROM EXISTING STOCK,
NO RENT CONTROL



Quantity of Standardized Housing Services
(dwelling unit.months/mo.)

FIGURE 5D.4

DIRECT PROVISION FROM EXISTING STOCK
WITH RENT CONTROL



To summarize, the direct provision of public housing from the existing rental stock can always increase the housing services consumed by target groups. In the absence of rent controls it can increase the total supply of housing services. In the presence of binding rent controls, it can only increase the excess demand for housing.

The effects of purchasing existing housing formerly vacant or owner occupied are somewhat different. The initial effect of this policy is to shift the short run supply curve of rental housing leftwards, as in the case of provision of public housing from new construction. The consumption of rental housing by target groups increases. However the stock of owner-occupied houses declines. This should lead to a general rise in the price of owner-occupied dwellings, especially older ones. Since the owner-occupied market is not price controlled, increased prices should lead to an increase in the construction of new owner-occupied housing and increased retention and rehabilitation of the existing ownership stock. The increased price of owner-occupied housing also increases the relative attractiveness of rental accommodation, and may lead to some increase in the demand for it.

Looked at from a different perspective, the purchase of existing owner-occupied housing to deliver social housing programs displaces the former occupants of the owner-occupied stock. Some of these former owners will purchase newly constructed housing while others attempt to find rental accommodation.[28] The net effect is to increase both the demand for rental housing and the demand for newly constructed ownership housing.

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[28] Of course some will find accommodation in the existing

3. Effect on Housing Policy Objectives

The previous discussion indicates clearly that policies which directly provide housing services can differ greatly in their effects. In this section we will briefly consider the effects on each of the rental housing policy objectives identified in the study.

Availability

The effect of directly provided public housing on availability depends critically on the choice between new and existing housing stock and on the presence or absence of rent controls. The first effect of public housing programs based on new construction is to reduce excess demand for rental housing, thus increasing vacancy rates or decreasing waiting lists. This effect is greatest in rent controlled markets. Thus the initial effect of these programs is to increase the availability of rental housing, especially for the target groups. Availability is reduced over time, however, as private housing stock is withdrawn from the market. In the absence of rent controls, normal vacancy rates will tend to be reestablished. If there are binding

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owner-occupied stock. But this displaces other households who must in turn choose between newly constructed or existing housing in the rental or ownership market.

rent controls, excess demand pressures will tend to build continuously.

The initial effect of public housing programs based on the existing rental stock is to increase excess demand for housing, thus decreasing availability except for the target groups. If rent controls are binding, this excess demand will continue and intensify. In the absence of rent controls, normal vacancy rates will tend to be re-established as private sector supplies increase.

The purchase and renovation of existing rental housing creates several difficulties of affordability and equity which are discussed below.

Affordability

The affordability of rental housing is clearly increased for those members of the target groups who succeed in obtaining directly provided public housing. For the remainder of tenants the effect depends on the presence or absence of rent control and on the choice of new or existing housing. Public housing supplied from new construction tends to depress rents, especially in those segments of the housing market providing similar accommodation. The quantitative importance of this effect has not been established empirically, but it could be significant if the new housing constituted a large fraction of the local rental stock. If the market for rental housing is strongly segmented regionally and by income, a major public housing project could have quite noticeable effects. This improvement in affordability will be eroded as the private stock is withdrawn from the market, but if there are strict local controls on conversion and demolition the lag may be substantial. Nevertheless, direct provision of new public housing is not an effective long term strategy for improving the affordability of rental housing for any tenants other than those actually accommodated in the projects.

Public housing supplied from the existing rental stock is even less effective in reducing the affordability problems of tenants not residing in public housing. In the absence of rent controls, the purchase of existing housing tends to drive up general rent levels. There is no direct empirical evidence on the importance of this effect, but the results of the EHAP experiment discussed in section VB provide some indirect clues. It will be recalled that the EHAP experiments were unable to detect any increase in general price levels as a result of the supply experiment. If this result was due to the low response of housing demand to the housing allowance program, it provides no relevant evidence. But if the absence of price increase was due to the ability of the stock to adjust relatively quickly to increased demand, a similar increase in demand due to public housing should not lead to significant rent increases, provided it is phased in gradually.

In the presence of rent controls, there is no effect on legal prices, but there may be an increase in illegal rents and key money practices.

This analysis tends to obscure the special problems faced by former residents of the rental units which are purchased for the delivery of social housing programs. Often these tenants will have low incomes themselves, but they may not be on the official waiting lists for public housing. Their situation is worsened by the renovation that a public landlord is expected to carry out. This renovation would normally lead to higher market rents, which could be charged since the public agency would be exempt from rent controls. This worsens the affordability problem for the sitting tenants of the building. Either they are forced to pay higher rents, or they must seek alternative accommodation, or they must be allowed to stay as subsidized tenants. The last possibility contributes to the overall objective of increased affordability for lower income groups, but it does not necessarily reduce the length of the waiting list for public housing.

Public housing provided through purchase and renovation of existing ownership stock improves the affordability of housing for target groups, but raises the cost of owner-occupied housing for other low-income households.

To summarize, directly provided public housing is an effective tool for improving the affordability of housing for those tenants who actually obtain the subsidized housing. Rental housing directly provided from newly constructed stock can temporarily improve affordability by reducing general rent levels, but this effect is ultimately transitory. Rental housing directly provided from the existing stock may increase the affordability problems faced by tenants of the private stock.

Rent Gouging

Since publicly provided new housing tends to reduce rent levels and increase vacancy rates in the short run, it tends to reduce the probability of rapid rent increases. On the other hand, a large public housing program based on the purchase of existing stock could drive up the general rent level and lead to complaints of rent gouging. The same programs might reduce vacancy rates, reducing opportunities for tenants to escape exploitative landlords, and hence might increase the opportunities for individual cases of rent gouging.

Security of Tenure

Directly provided housing does not alter the terms of the contract between private landlords and their tenants. Accordingly, the effect on security of tenure for these groups would be minimal.

Tenants of public housing projects often have less security of tenure than tenants in private buildings. This is especially true if they are obliged to leave a subsidized unit when their family circumstances change. In the past, tenants of public housing projects have complained about unreasonable restrictions on their conduct. As an example, a single mother might be concerned that the income of her male companion would be added to hers in computing the rent were he to move in with her. Considerations of this sort add to the frustrations of tenants of low income housing. In general the tenant of public housing is always subjected to some additonal restrictions on his tenure.

No evidence is available on the importance of these effects.

Social Diversity

Public housing programs can have very substantial effects on the social composition. On the one hand, the 100% rent-geared-to-income units provided in the 1950's and 1960's segregated low income families from the rest of society. This problem continues in the OHC public housing portfolio. Such ghettoization poses severe problems, especially for growing children. It may promote friction with neighbours, vandalism, problems in school, and other difficulties (Dennis and Fish, 1972, 183). By 1970 definite efforts were being made to reduce these problems by increasing the number of relatively better off tenants in public housing projects (Dennis and Fish, 180). The final outcome was the substitution of Section 56.1 programs (non-profit and co-operative housing) for the earlier public housing programs.

The key aspect of the newer programs is their emphasis on integrating subsidized tenants with those able to pay full market rates. This is accomplished by limitations on the percentage of units which can be occupied by rent-geared-to-income tenants. It has also been suggested that there was a deliberate reorientation of the "socially assisted" housing program away from families and towards the elderly, who pose fewer administrative problems. (Rose, 1980, 96).

The non-profit and cooperative housing programs have been successful in integrating rent-geared-to-income and other tenants. They have also been successful in avoiding the deliberate construction of substandard quality housing which was "good enough for the poor" (cf. Dennis and Fish, 1972, 174-75). However this has been achieved at the cost of providing as many as three subsidized units for middle income families (who pay "lower end of the market" rates) for every unit constructed for low income families. As we shall see below, this has significantly increased the cost of the program.

Social integration can be achieved at much lower cost by purchasing existing housing dispersed throughout the community and renting it at rent-geared-to-income levels. Rice and Lewis (1984) show that this type of public housing can achieve very high levels of neighbourhood support and tenant satisfaction. Integration of subsidized tenants with the surrounding community is particularly evident in the case of families with children.

To summarize, the effects of public housing on social diversity can range from extremely negative to very positive depending upon the design of the program.

Equity

The equity of policies which directly provide rental housing has been discussed by Chant (1985, 207-212) and little need be added in this paper. Briefly, the direct provision of public housing in 100% rent-geared-to-income projects can be very successful in confining its benefits to target groups. However, the non-profit and co-operative housing programs provide a relatively large fraction of their total benefits to households in the middle income ranges. For example, Chant (1985, 241) reports that households that would have had income in excess of about $20,000 in 1980 represented 33 percent of the participants in the non-profit and co-operative housing programs but only 5 percent of the participants in the 100% RGI public housing programs. Although calculations by Fallis (reported by Chant, 1985, Table 6.8) indicate that higher income groups gain proportionately less from all public housing groups than they would from a neutral alternative[29], it is still true that higher income groups receive a large fraction of the total benefits from the programs.

The direct provision of low income rental housing is usually judged to be horizontally inequitable because of the low participation rates by target groups (Chant, 210). Unlike housing allowance programs, the direct provision of

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29. A neutral alternative would provide benefits proportional to income. Notice that this means the absolute value of the benefit increases with income level.

rental housing alleviates only the problems of those fortunate enough to find a subsidized place. Even then the degree of subsidy may vary considerably (Chant, 212-13).

The frequently expressed concern about the "stigma" attached to residents of the early public housing projects arises out of a generalized feeling that the commentators would not like to be forced to live in similar conditions, and hence that these early projects should be ranked low on the criteria of fairness or justice. The more recent, income integrated projects rank higher on this score. Finally, direct provision of rental housing through the existing housing stock, as in the Hamilton project, can provide living conditions which external observers view as highly in keeping with human dignity. Thus the treatment of tenants of public housing ranges from very unfair to very fair.

Finally, in terms of market justice, the direct provision of housing services is less unjust than the control of rents through rent control. Landlords whose rent receipts are driven down by the competition of publicly provided housing may, however, feel that competition to be unfair.

Production at Least Cost

It was noted in Chapter IIC above that many authors have expressed concern that the cost of providing rental accommodation directly is significantly greater than that of the private market. Data from CMHC (1983, 126) suggest that in 1979 the construction costs of apartments built in Ontario under section 56.1 programs were 19 percent greater than those of apartments merely insured under section 6 of the NHA (see Table 2.25 above). In 1980 they were 53% higher. Operating costs were also higher in section 56.1 projects than in section 6 projects, but operating costs in section 44 (Public Housing) projects were still higher.

These data indicated that the unit cost of providing public housing directly may be greater than the unit cost of rental housing provided through the private sector. The data are not conclusive, because the characteristics of the apartments in the various categories may differ. Nevertheless, there is some indication of cost inefficiency in the provision of public housing. Chant (1985, ch 7, 47) cites evidence that this may be an instance of a more general principle that public production is always more expensive than private production.

The cost of directly providing rental accommodation for low income families can be greatly reduced if existing housing stock is purchased and renovated. Lewis and Rice (1985, 8) estimate that the Hamilton project achieved savings of $24,500 per unit (at 1982 prices), or 45% of the cost of a new unit. This performance was achieved by innovative planning in a private non-profit agency. This indicates that way in which public housing is delivered may significantly affect its cost.

Respect for Other Social Goals

As in the case of the policies discussed earlier, the direct provision of rental housing compromises Ontario's ability to pursue other goals in proportion to the cost to the taxpayers of the subsidies provided. There is considerable agreement that our current methods of directly providing rental accommodation entail a very high tax cost. This is primarily due to the need to ensure social integration and the choice of new housing as the delivery mechanism.

The most widely cited study of the tax cost of alternative methods of providing rental accommodation to low income families is contained in CMHC's (1983) evaluation of the section 56.1 non-profit and co-operative housing programs. This study calculated the cost of delivering rental housing from a new 20 unit townhouse development financed under a number of federal subsidy programs. The calculations were repeated and further discussed by Clayton (1984).

The study computes the present value of all the subsidy payments required over the life of the project and calculates the average subsidy cost per unit and per rent-geared-to-income unit. The results indicate that the present value of the subsidy required to provide one rent-geared-to-income unit through the section 56.1 programs is of the order of $100,000. At the 13% rate of discount used in the study this is equivalent to an annual payment of approximately $13,000 per year. Co-operative housing was found to be the most expensive way of providing rent-geared-to-income units. Next most expensive was the rent supplement program, followed by the non-profit housing program.

In section 5B we calculated that the annual cost of providing a housing allowance sufficient to eliminate the gap between actual rents and 30% of gross income for 200,000 Ontario households in core need would cost somewhat less than $180 million per year. The average allowance per household would be about $1000. In section 5C we calculated that the general rent level could be reduced by an equivalent amount (about $1000 per year) by increasing the rental housing stock by approximately 7 percent, or 84,000 units. The total subsidy cost would be of the order of $84 million per year plus the amount required to re-establish "normal vacancy rates" but the effect would only be temporary. Ever increasing subsidies would be required as subsidized housing displaced the existing stock. A similar calculation can be made for direct public provision of rental housing.

Let us assume with the CMHC study that section 56.1 housing can be supplied for a tax cost with present value of about $50,000 per unit. This is roughly equivalent to an annual payment of $6,500.[30] An increase of 84,000 units in the rental stock would entail an annual subsidy of approximately $546 million, roughly six times the size of the subsidy required for the housing allowance program discussed in section 5B. As was the case for the supply side subsidies discussed in section 5C, this figure would grow as the existing housing stock was displaced.

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[30] Using the 13 percent discount rate adopted by Clayton (1984).

To summarize our discussion of publicly provided housing, we can review its contribution to solving the major rental housing problems identified in Chapter IV. In a rent controlled environment, public housing provided from newly constructed stock can reduce the excess demand for subsidized rental accommodation, and hence temporarily improve availability. This improvement can only be temporary, since incentives to reduce the existing stock remain. Under a more relaxed system of rent control, directly provided housing tends to displace rental housing that would otherwise be supplied by the private sector. Directly provided public housing improves affordability for those tenants who are fortunate enough to obtain subsidized units. Its effect on other tenants can vary: if the housing was provided from the existing rental stock, affordability for other tenants will be reduced. If it is provided from the existing ownership stock, the net effect on the rental market may be a slight reduction in rents.

Publicly provided housing requires very large subsidies, and hence compromises the achievement of other social goals. This is particularly true of modern section 56.1 type projects which attempt a high degree of income integration. Any attempt to reduce the degree of income integration by increasing the fraction of assisted families in a unit is likely to lead to a recurrence of social difficulties. Publicly assisted housing can be provided at relatively low cost while still meeting integration objectives by delivering it through purchase and renovation of the existing stock. This procedure, however, may worsen affordability problems for some low income households who are not direct beneficiaries of the program.

E. Summary

In this chapter we have examined the basic approaches available to the Province in meeting its rental housing policy objectives in light of the specific problems we identified as most likely to occur. These specific problems were general availability, affordability for low income groups, and the need to respect other social goals. At the same time, the province's ability to solve these problems is constrained by two particularily important considerations. The first was that reliance on the private sector for any portion of the supply of housing services requires that landlords receive rents sufficient to cover the full costs of providing those services, including the opportunity costs incurred by foregoing alternative uses of their property. The second was the need to avoid the social costs associated with ghettoized low income housing.

The policies available to influence the rental housing market may be grouped into four fundamental categories, namely

i. modifications of the present scheme of rent regulation,

ii. demand side policies intended to alter the disposable income of tenant families or the incentives they face,

iii. supply side policies intended to alter the incentives faced by private entrepreneurs, and

iv. the direct provision of public housing through public and private non-profit agencies and co-operatives.

Within the first category may be placed modifications to the guideline increases and pass-through provisions of the present scheme of rent regulation, schemes to provide fair-rate-of-return regulation of rents, and rent arbitration schemes. All of the variants considered would act so as to reduce deviations of controlled rents from their market clearing levels. To the extent they are successful in this, new rental construction, maintenance and rehabilitation of existing stock will all be encouraged.

All three variants pose greater or lesser difficulties. Modification of the statutory rate of increase to allow for rent increases in excess of inflation would be the simplest strategy. This would allow a gradual return to market clearing rents. Special attention would be required to the details of the formula and to its impact on various classes of landlord. Drawbacks include the possibility that the guideline ceiling would become a floor pushing rents beyond their competitive levels.

Rate of return regulation schemes would be difficult to implement in view of the large number of diverse landlords who would need to be regulated. A number of other technical difficulties must also be faced.

Rent arbitration schemes have considerable appeal on the grounds that they would by-pass the regulatory process whenever mutual agreement between landlord and tenant could be reached. Unfortunately they, too, present a number of practical difficulties. Among these are the need to specify a formula for the guidance of arbitrators and the possibility of substantial inequities developing among tenants of the same building.

CHAPTER VI

POLICY MENUS

In the preceding chapters of this submission we have reviewed at considerable length most of the considerations which are relevant to the design of rental housing policy in the Province of Ontario. In this chapter we examine several possible approaches to rental housing policy whch might be adopted by the province of Ontario. Our discussion will be based on the elements discussed in earlier chapters.

To recapitulate, in Chapter I we identified a number of potential objectives or "targets" for rental housing policy. These included availability, affordability, prevention of rent gouging, security of tenure, social diversity, equity, production at least cost and respect for other social goals.

In Chapter II we considered how well these objectives have been met over the past two decaades. We concluded that Ontario faces substantial problems in the areas of availability of rental housing, affordability of rental housing for low income groups, and in the provision of rental housing at lowest achievable cost. In addition the present programs which subsidize rental housing have proven to be expensive in terms of taxes and have reduced Canada's and Ontario's abilities to reach other social goals.

In Chapter III we considered the organization of the private market for rental housing and concluded that the private sector has a demonstrated capability to supply rental housing of all qualities, provided the rent is sufficient to cover the full cost of providing the housing.

In Chapter IV we considered future developments in the rental housing market. Demographic studies indicated that the rate of growth of demand for rental housing is likely to be relatively slow over the remainder of the '80's and into the '90's. Nevertheless the changes to the rent review system currently under consideration by the provincial government will tend to reduce the private sector's ability to deliver rental housing and the currrent budgetary position of the federal government and the recommendations of the MacDonald Commission suggest that federal aid to public housing programs may be reduced. Consequently, the problems of availability and affordability are likely to continue and grow.

In Chapter V we considered the policies available to governments in formulating rental policies. The main categories of policy considered were modifications of rent review, demand side policies such as shelter allowances, supply side policies such as construction subsidies, and the direct provision of housing by government and non-profit agencies.

In this chapter we attempt to bring all of these considerations together to examine several combinations of policies or "policy menus" which might form an appropriate strategy for the Ontario government to pursue in the realm of rental housing.

We begin in section A by drawing together Chapter V's discussion of the various instruments of government policy in the field of rental housing. In section B we consider the consequences of the status quo, that is a continuation of the present system of rent review without any complementary or supplementary policies. The status quo ameliorates problems of affordability for many households but exacerbates problems of availability. Consequently policy makers must choose either to maintain the present system of rent control and pursue policies to alleviate the availability problems it creates or else to relax the present system of rent controls and implement other policies to deal with the affordability problems which would remain.

In section C we consider the consequences of the first option, that is continued rent regulation with complementary policies. In sections D and E we consider alternative methods of relaxing rent controls. Section D discusses Rate of Return regulation with complementary policies and Section E discusses Rent Arbitration with complementary policies. Section F summarizes the discussion.

A. Synopsis of Available Policies

The discussion of chapter V showed that any single rental housing policy had mixed effects on the target variables of interest to policy makers. Usually a single policy will improve perfomance on one objective while harming it on some others. The precise effects depended upon the presence or absence of other policies. In particular, the effect of supply side subsidies, demand side subsidies and direct provision policies all depend crucially on the nature of the system of rent regulation which is in effect. Finally, the short-run effects of a policy were frequently different from the long-run effects.

Our analysis of the various policy options was also handicapped by the absence of precise quantitative estimates of the cost and consequences of the individual policies. Consequently we were forced to rely on very crude estimates of the order of magnitude of these effects. More research could reduce our uncertainty somewhat, but it is important to realize that a high degree of certainty is unachievable. Economic science is much better suited to analysing the qualitative effects of rental housing policies than the quantitative effects.

For all the above reasons, it is difficult to summarize briefly and adequately the results of our discussion in Chapter V. Nevertheless, an attempt has been made to capture the main points in Table 6A.1. The reader is requested to remember that the detailed analysis is much more equivocal than the bold summary statements in the table.

TABLE 6A.1: COMPARISON OF RENTAL HOUSING POLICIES WITH A HANDS-OFF STRATEGY

	Policies					Direct Provision	
Objective	Rent Control	Rate of Return Regulation	Liberalized Guidelines/ Arbitration	Shelter Allowances	Const. Subsidies	Existing Stock	New Construction
Rent Levels	lower	higher	equal	slightly up	lower	higher	lower
New Construction	much lower	same or less	equal	more	more	slightly up	more
Conservation of Existing Stock	less	less	same	more	less	more	less
Availability	much worse	same	same	same	same	same/ less	same/ more
Affordability	somewhat more	mixed	same	more	more	more	more
Prevention of Rent Gouging	more	more	more	same	same	same	same
Security of Tenure	same/ more	same	same/ more	same/ more	same	same/ less	same/ less
Equity	poor	fair	good	good	poor	poor	poor
Social Diversity	same	same	same	same	same	good	poor/ good
Least Cost Production	higher cost	same/ higher	same	same	higher cost	low cost	higher cost
Respect for Other Social Goals	medium tax cost	low tax cost	low tax cost	high tax cost	high tax cost	medium tax cost	very high tax cost

SOURCE: Discussion in Chapter V. Readers are reminded that this summary cannot capture fully the detailed analysis of that chapter.

In Table 6A.1, each of the policies considered in Chapter V has been compared with the strategy of no intervention at all in the rental housing market. Such a "hands off" strategy would allow rent levels to adjust rapidly to their short-run equilibrium levels. In the long-run rent would approach the long-run equilibrium level as the rental housing stock adjusted to new conditions. The effect of each policy on each of the rental policy obectives is reported in the column below each policy option. The effect of the policy on rent levels, on new construction and on the conservation of the existing stock is also reported.

Four approaches to rent regulation are summarized in Table 6A.1. The present system of rent review is referred to as "Rent Control" in the Table. Reading down the column we see that, when compared with a "hands-off" policy, rent control tends to reduce rent levels, inhibit new construction and discourage the conservation of the existing rental stock. Since there is excess demand for housing, availability is a problem. Tenants in rent controlled apartments find their accommodation more affordable. There is more protection against rent gouging than in a "hands-off" environment and the system is noticeably unfair to owners of the existing stock and to those who cannot find rent controlled acoommodation. Social diversity is not affected much. Housing services are not provided at lowest cost, because the pass-through provisions give little incentive to carefully control costs. Finally, the rent control policies lead to losses of property and income tax revenues which may compromise other social goals.

The entries in the remaining columns are to be read in a similar manner. Since the effects of liberalized rent guidelines and rent arbitration are similar, they have been included in the same column.

B. The Status Quo

In Chapter II we concluded that the most serious rental housing problems presently facing Ontario were a lack of affordable housing for low income households and a generalized shortage of rental accommodation for all groups. The present policy of rent control alleviates the affordability problem for those households who have obtained rent controlled accommodation, but it has not eliminated it. Moreover, the present system of rent control is clearly inequitable and housing services are not being provided at lowest achievable cost. We saw in Chapter III that one underlying cause of this unsatisfactory condition was that the rents earned by landlords were generally insufficient to cover the full opportunity cost of providing housing services. Finally we saw in Chapter V that the demand for rental housing is likely to grow relatively slowly over the next decades, as the post-war babies move into ownership accommodation. Much of the growth in demand for rental housing will be from older households. This implies that, while the rental market need not be excessively tight in the near future there will be a need to rearrange the existing housing stock to address the needs of older tenants.

The present system of rent controls in the Province of Ontario has kept rents below the short-run market clearing levels. This has clearly reduced the rent burden for many poorer households. This has contributed to the objective of maintaining affordability. Unfortunately, as shown in Table 6A.1, rent controls have tended to worsen the performance of the rental housing market on other criteria. In particular, rent controls discourage new construction, discourage the conservation of the existing stock, and lead to excess demand for rental housing accommodation. The latter is reflected in a lack of availability: vacancy rates are low, mobility is low, and the possibility of exploitation and abuse of tenants is increased.

To achieve its housing goals, therefore, the Province of Ontario must choose between two grand strategies. On the one hand, it can retain the existing form of rent control and attempt to remedy the problems associated with the lack of availability by pursuing complementary policies designed to promote new construction and conserve the existing stock. On the other it can modify the system of rent control to allow all landlords to recover the full cost of supplying rental housing, thus alleviating the availability problem, while pursuing complementary policies designed to help poorer households cope with the high cost of rental accommodation. In the following sections we will explore the advantages and disadvantages of each strategy.

C. Rent Control with Complementary Policies

If the Provincial Government opts to continue the present scheme of rent controls, our analysis indicates that there will be growing availability problems in rental housing. In addition, there is a continuing problem of equity towards owners of the existing stock of housing and towards tenants unable to find suitable accommodation. We must now consider what complementary policies are available to alleviate these problems.

The availability problem might be tackled by promoting the construction of new housing or by encouraging the conservation of the existing stock. Reading across the new construction row of Table 6A.1 we note that, compared to a hands-off policy, shelter allowances, construction subsidies and the direct provision of housing all encourage new construction. This suggests that all might serve as complementary policies. Unfortunately, shelter allowances and the direct provision of housing from the existing stock both operate on new construction via the price system: they raise the general level of rents and thus encourage new construction. Under the present system of rent controls the price system cannot perform this function. Similarly, supply side subsidies encourage new construction by raising the return on it to "economic" levels. Unless the supply side subsidy is sufficient to fill the entire gap between controlled and economic rents, it will have little effect on new construction. Accordingly, if rent controls persist, the chief policy that can be used to alleviate the availability problem is the direct provision of housing services from newly constructed stock. If the Province chooses to retain the current system of rent regulation, and if it wishes to alleviate the ensuing shortage of rental housing, it will be virtually forced into adopting a major program of new construction to support the direct provision of rental housing.

Unfortunately, the latter policy entails disadvantages of its own. Referring again to Table 6A.1 we note that the construction of new housing for direct public provision tends to discourage the conservation of the existing stock and tends to lead to higher cost housing and a very high tax burden. Moreover, the policy was judged inequitable in its treatment of similarly placed households and a poorly executed program of public housing can seriously reduce social diversity and integration. None of the other policies considered could significantly offset these negative aspects of the direct provision policy. In particular, none of the other policies can encourage the conservation of the existing housing stock in the presence of rent control. The Province and its municipalities would therefore be driven to imposing increasingly severe legal barriers in the way of conversion and demolition.

To conclude, should the Province choose to maintain the present system of rent controls, there is really only one complementary policy which it can adopt: the direct provision of rental housing from newly constructed stock.

If this strategy were pursued with sufficient vigour, the province could attain its rental housing objectives of affordability and availability. This achievement would come at the cost of increasing pressure for demolition and conversion of the existing stock, continued inequities toward landlords and some tenants, and most importantly, at an extremely high cost to the public purse.

D. Rate of Return Regulation and Complementary Policies

We must now consider the alternative strategies available to the Province. These all involve liberalizing the system of rent regulation to alleviate problems of availability while pursuing complementary policies to compensate for reduced affordability. In this section we consider modifying rent review along the lines proposed by Quirin (1985). In the next section we consider a scheme of liberalized guideline formulas or rent arbitration.

By rate of return rent regulation is meant a rent regulation system in which the allowed rent is determined so as to provide a prescribed rate of return to the landlord. By definition the allowed rent covers the landlords' full costs of providing housing services, and consequently the expected return to a landlord over the life of a project equals the rate which would be expected under a hands-off policy. Nevertheless the time stream of returns will be different. Under a hands-off policy, the cash flow from a newly built rental housing project is likely to be low or negative for a number of years. Under the scheme proposed by Quirin, the net cash flow is positive at all times. It does not rise as fast as the rate of inflation and consequently the real burden of the rent will fall over the life of the project, as discussed in Chapter V.

Referring to Table 6A.1, we note that under a rate of return regulation policy, rent levels in new projects would be higher than in a hands-off market. Since high initial rents would tend to make renting new apartments difficult, the amount of new construction might be somewhat lower than would occur in a hands-off market, but it is likely that it would be greater than under a binding system of rent controls. Because older buildings receive lower cash flows, the incentive to convert or demolish is intensified relative to a hands-off market, but since a return is allowed on owners equity in the existing stock the incentive to demolish or convert is probably less than under binding rent controls. Equity is improved for landlords, but tenants in comparable housing could pay widely different rents depending on the age and financing of the building they occupy. The cost of production of housing could be inflated if the allowed rate of return is greater than the actual opportunity cost of capital to the landlords.

It is useful to compare the predicted effects of rate of return regulation with those of a liberalized guideline or rent arbitration scheme. It will be shown in the next section that both are superior to the rate of return regulation model on almost every respect.

A move to rate-of-return based rent regulation would almost certainly improve the availability of rental housing in the long-run. It would, however, increase the average level of rents from those presently experienced and hence would increase affordability problems for poorer households. Accordingly it would be necessary to supplement this policy with one of the remaining policies to alleviate affordability problems. Since these policies are discussed in the next section, and since rate of return regulation is probably dominated by liberalized guidelines or rent arbitration, nothing further need be added here.

E. Liberalized Guidelines or Rent Arbitration with Complementary Policies

As discussed in Chapter V, the negative effects of rent regulation could be substantially mitigated by adopting a formula for statutory increases which consistently allowed for rent increases slightly in excess of inflation. The main purpose of such a scheme would be to prevent individual extraordinarily rapid increases in rent. Within a few years, the rent allowed under such a scheme should be approximately equal to market clearing levels. At that point it might be possible to convert to a system of rent arbitration.

A rent arbitration scheme, as discussed previously, would be designed primarily to prevent the occasional exploitation of individual tenants rather than to influence the general level of rents. The rent arbitration formula should be designed to allow landlords a fair rate of return on their investment, including equity investment, and should recognize the full opportunity cost of the land occupied by the building. Adjustments reflecting the rent on similar units should be allowed if a scheme which avoids excessive circularity can be designed. The primary purpose of the scheme would be to prevent the discriminatory "economic eviction" of tenants who would otherwise have secure tenure. This would be particularly important for some classes of tenant, such as the infirm elderly, for whom the transactions costs of moving would be especially high.

The effects of this policy can be read from Table 6A.1 by reversing the predicted effects listed in the "rent control" column and adjusting for the effects listed under the "Arbitration/Liberalized Guidelines" column. Thus either scheme is predicted to lead to higher rent levels, more new construction and conservation of the existing stock, and more available but less affordable rental housing. In addition, the effects on opportunities for rent gouging at the individual level and security of tenure would be comparable under the two schemes. The tax cost of both schemes would be low. The cost of production of rental housing might decline slightly under liberalized rent guidelines, since landlords' ability to automatically pass on cost increases would be reduced.[1]

Thus a well designed scheme of rent arbitration or liberalized guidelines would lead to essentially the same results as a "hands-off" policy except that opportunities for "gouging" individual tenants would be reduced. It would also lead to the same decreases in affordability that a hands-off policy would incur.

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[1] This would not be the case if the costs facing individual landlords entered the formula.

To deal with increased affordability problems, the Province could choose one or more policies from the remaining columns of Table 6.1: demand side subsidies such as shelter allowances, supply side measures such as construction subsidies or tax breaks, or direct provision of rental housing from newly constructed or existing stock. These alternatives will be considered in the following subsections.

1. Liberalized Guidelines or Arbitration with Shelter Allowances

Since liberalized guidelines would lead to a restoration of market rents and since the rent arbitration scheme would not attempt to influence the short or long-run equilibrium rental, the effects of shelter allowances combined with either scheme can be read directly from Table 6A.1. It will be noted that shelter allowances are predicted to increase rents only slightly. At the same time they encourage conservation and new supply and are rated equitable. Most importantly, they are designed precisely to deal with the major objective missed by the liberalized rent review policy: affordability. Shelter allowances were rated as the most effective way to reduce the rental burden faced by low income households.

The major problem lies in the high tax cost associated with a shelter allowance program. It should be noted, however, that all the policies designed to alleviate affordability problems involve large public expenditures. This should come as no surprise, since the affordability problem is primarily a reflection of the fact that poor households, by definition, lack the financial resources required to purchase all the goods and services that observers consider necessary or desirable. To alleviate the affordability problem, poor households must be enabled to consume more goods and services. This can only be done by reducing the consumption of other groups, generally through taxation. Any meaningful transfer of social resources to poorer groups must entail a high cost, either visible through taxation or hidden in some other form.

2. Liberalized Guidelines or Arbitration with Supply Side Subsidies

The major difference between supply side subsidy programs and demand side subsidy programs is that the former tend to depress the general level of rents. This is an advantage to tenants, but unless the subsidy is equally available to all suppliers of rental housing, the lower rents will restrict the supply of housing from non-subsidized sources. Reference to Table 6A.1 shows that construction subsidies (used as an example of all supply side policies) are generally predicted to have the same effects as demand policies, with the following significant exceptions: conservation of the existing housing stock is discouraged because of reduced rents and vertical equity is compromised because rent reductions are not confined to poorer groups. In addition, some subsidy programs may encourage wasteful practices that raise the cost of producing housing.

The tax cost of attacking affordability problems through subsidy of new construction was judged to be very high. The initial cost is about the same size as that estimated for a shelter allowance policy, but the cost rises as existing stock is gradually withdrawn and replaced by new, subsidized, construction.

3. Liberalized Guidelines and Direct Provision

A scheme of liberalized guidelines or rent arbitration could be combined with a continued program of directly provided rental accommodation. As was clear from our earlier discussion, the choice of newly constructed or existing housing greatly affects the predicted results of such a policy. Once again, we assume that the rent arbitration scheme is designed to cause minimum deviation from market equilibrium rent levels. Consequently, there should be no problem with availability once the system has become well established. However, the initial impact of directly providing rental housing through new construction would be to increase the stock, reduce rent levels slightly, and to increase availability, while the initial impact of directly providing rental housing through purchase of existing stock is the reverse.[2]

Both versions of direct provision were judged horizontally inequitable because they offer special advantages to those households that are successful in obtaining subsidized accommodation, while leaving equally needy households to pay full market rates. Thus publicly provided housing only solves the affordability problem for a limited number of households. This constrasts sharply with a shelter allowance scheme.

Social diversity and integration are greatly affected by the design of programs to directly provide housing. We have seen that the early public housing schemes were severely criticized for the social conditions they created by isolating their tenants from the rest of the community. On the other hand, the more recent section 56.1 programs have achieved much better acceptance at the cost of subsidizing two or three medium income households for every poorer one. Finally, a carefully designed program of aquiring existing stock shows promise of achieving social diversity and integration at relatively low cost.

Given the constraint posed by the need to ensure acceptance of the projects, the tax cost of directly providing housing in newly constructed stock is very high, while the cost of directly providing housing in renovated existing stock is comparatively low. Thus the latter form of the program would provide greater respect for other social goals.

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[2] Recall that the effect depends only on the amount of extra housing demand created by offering poorer families subsidized rents, not on the total amount of housing stock transferred to private ownership, and that even this impact is mitigated by renovation activites associated with the policy.

To summarize, a liberalized rent review guideline or rent arbitration scheme combined with direct provision of rental housing to low income families would solve the main problems of availability of rental housing and would help some poorer households attain affordable accommodation. On balance, a scheme based on the aquisition of existing stock would be preferable, since it encourages the conservation of the existing stock, can ensure social diversity and integration and has a lower tax cost. Neither program, however, successfully addresses the affordability problem of those unable to find accommodation in the public projects.

4. Multiple Programs

It is possible to conceive of a three pronged strategy consisting of liberalized rent review, shelter allowances and a continued program of direct public provision based on the existing stock. Such a program could achieve most social rental housing objectives, but would incur significant tax costs.

This strategy would again involve a rent arbitration scheme designed to deal with individual inequities while affecting the general rent level as little as possible. This would eliminate excess demand for rental housing and solve the problems of availability and individualized rent gouging. Combined with this would be a program of shelter allowances, designed to reduce the rent burden experienced by poorer households. This would directly attack the affordability problem faced by these households. Finally, there might be some advantage to a limited program of directly provided housing based on the purchase and renovation of existing stock. Such a program could be designed to improve the social integration of poorer households, provide for those with special needs, and to encourage the preservation of the existing stock beyond the amount which would occur under a "hands-off" policy.

One problem under this approach would be the possibility of doubly subsidizing the tenants of directly provided housing. It would be expensive and inequitable to provide all households with an income supplement sufficient to obtain affordable accommodation in the private market and simultaneously offer subsidized accommodation to a chosen portion of these households. Thus under the three pronged strategy tenants of directly provided housing would be required either to give up their income supplement in return for a subsidized rent or else to pay full cost recovery rents on the directly provided housing. The latter scheme is probably the most workable. It would require all municipal or non-profit rental housing agencies to charge rents on a full cost recovery basis.

This problem would be less important if the demand side assistance were granted in the form of a shelter allowance or a rent supplement tied to an individual rental unit.

Thus the case for direct provision of rental housing in a three pronged strategy involving income maintenance is somewhat tenuous. Clearly no barriers should be placed in the way of non-profit groups that wish to supplement the private market, and indeed a very limited degree of assistance to such groups might be justified if they were demonstrably successful in promoting the integration of poorer households into the community. Beyond that, large scale subsidization of directly provided housing in addition to financing an income maintenance scheme is inequitable and risks undermining the incentives for private landlords to aquire and maintain rental stock.

A second multiple strategy would be to combine liberalized rent controls, publicly delivered housing, and a shelter allowance scheme. If the allowance were based on actual rent paid, the problem of double subsidies could be more easily avoided. Nevertheless, the positive justification for public delivery of social housing when a shelter allowance is available is not entirely clear. If it is accepted that publicly delivered housing is more expensive than comparable private sector housing, then there is a case to be made against it.

F. Summary

Governments may wish to achieve a number of somewhat incompatable objectives in their policies towards rental housing. Since the instruments of government policy differ in their effect on the variables of concern, it will usually be best to adopt a package of several instruments rather than relying exclusively on any one policy. In this chapter we have reviewed a number of such packages.

There are two grand strategies available to the government. Either it can retain the current system of rent review in an attempt to maintain the affordability of rental housing, in which case it must choose policies to deal with the resulting lack of availability, or else it can liberalize the system of rent regulation and implement policies to deal with the problem of affordability.

Should the government choose to retain the present system of rent regulation it will be virtually forced into an extended program of direct public provision of rental accommodation in newly constructed stock. If major social difficulties associated with income segregation are to be avoided, this program of direct provision will be very expensive and problems of horizontal equity will remain.

Should the government choose to liberalize the system of rent regulation, a system of liberalized guidelines or rent arbitration designed to reduce inequities in individual cases without affecting the general rent level is probably more advantageous than a system of rate of return based regulation.

A liberalized system of rent regulation can be combined with a shelter allowance program, a program of direct provision, or both. The combination of rent control and shelter allowances seems to achieve most social goals. The combination of liberalized rent regulation and direct provision from existing stock seems attractive on many grounds but may involve horizontal inequities. Direct provision from newly constructed stock would be very expensive and would not solve the horizontal inequities.

A three pronged system involving liberalized rent regulation, shelter allowances and direct public provision could achieve improved social integration in addition to the remaining social objectives, but care would be required to avoid the double subsidy of tenants of publicly provided accommoda-tion. One solution would be to require municipal and non-profit housing agencies to operate on a full cost recovery basis, but it may be questioned whether many agencies could remain viable under such conditions.

CHAPTER VII

SUMMARY AND CONCLUSIONS

This paper, the final submission in a series prepared for the Inquiry, has been intended to illuminate the courses of action available to the Government of Ontario in pursuing its goals for rental housing. Previous submissions commissioned by the Inquiry have examined the rationale for government intervention in rental markets, the available evidence on the effect of rent review legislation in Ontario, alternative forms of rent regulation including rate of return regulation, and alternative policies which might complement a program of rent regulation. A further submission examined future requirements for rental housing.

This paper has attempted to draw together this evidence, supplemented where necessary, to address three fundamental questions:

i. what problems are most likely to emerge in attempting to meet rental housing policy objectives over the next 15 to 20 years,

ii. to what extent can these problems be solved by private and public initiatives, assuming the continuation of rent regulation in its present form, and

iii. how would alternative forms of rent regulation and complementary policies affect the economy's ability to meet these objectives?

To address these questions it was necessary to identify the objectives the province might wish to attain in rental housing, the policies (or "instruments") available to pursue these goals and the manner in which the instruments acted upon the economic system so as to achieve or fail to achieve the desired objectives.

The organization of the study reflected these steps. In Chapter I we examined possible objectives for rental housing policies. In Chapter II we considered how well these objectives have been met over the past two decades. In Chapter III we examined the operation of the market for rental housing in preparation for a later examination of policy instruments. In Chapter IV we used demographic projections and our earlier discussion to identify those problems which were likely to become most severe in the next two decades.

Having identified our major problems, we turned to the examination of policy instruments. In Chapter V we examined the three alternative schemes of rent regulation and a number of policy approaches which might complement them. Finally, in Chapter VI we considered packages of policies which might prove more effective than any single policy in achieving a broad range of social objectives.

In this final Chapter we will summarize our discussion and hazard a response to our fundamental questions.

A. The Objectives of Rental Housing Policy

Since rent regulation has been a key feature of housing policy in Ontario, we began by examining a list of five objectives proposed by Stanbury as possible rationales for the introduction of rent regulation in 1976. These were, first, the prevention of rent gouging, second, the maintenance or expansion of the stock of affordable housing, third, the reinforcement of security of tenure, fourth the remedying of market failures due to imperfect information, fifth, reducing the speed of upward adjustment of rents to new equilibrium levels. A sixth rationale, the creation or maintenance of social diversity in the core of large metropolitan areas, was added during the public hearings on Stanbury's submission.

Since Stanbury's list was intended only for the examination of rent regulation, it was not considered a complete guide to economic policy objective in the rental housing area. An alternative list was proposed to incorporate the traditional criteria of economic performance used in the study of industrial organization, namely efficiency, equity, price stability, full employment and technical progress.

Efficiency in economics is a state in which no opportunities for mutally beneficial exchanges have been ignored. Three aspects of efficiency were identified. Technical efficiency required the production of rental housing at the lowest achievable cost. Distributional efficiency required that there be an adequate stock of readily available housing to accommodate people as their personal circumstances change. Allocative efficiency required that there be neither overconsumption nor underconsumption of housing when account was taken both of the full social cost of producing the housing and the full social benefits realized by it.

By definition, rental housing policies are equitable if they are just and fair. Two concepts of justice were distinguished. The market view of justice, fully consistent with economic efficiency, is that the central engine of economic progress is the performance of mutally agreed upon contracts and that the essence of injustice is failure to fulfil such a contract. Equity requires simply that all persons be rendered impartially their due under such contracts. The non-market view of justice is based on older ideas of distributive and commutative justice. These ideas lead to goals of horizontal equity (equal treatment of those in similar circumstances), vertical equity (contribution according to ability to pay) and a generalized concept of a "fair price". Finally it was suggested that many people apply a rule of benevolence (the golden rule) in judging the "fairness" of a policy.

Much federal government housing policy seems to have had as a major goal the creation of employment through the stimulation of new construction. Recent thought in economics suggests, however, that the use of housing policy for such goals disrupts the housing market and should be avoided. Although the construction and maintenance of the housing stock occupies a significant fraction of the national output, few writers have stressed the issues of growth in productivity and technical change in this sector. Accordingly the criteria of technical progress and full employment with price stability have not been applied frequently in this study.

As a result of this discussion, a revised list of social objectives for housing policy was suggested. These were availabilty, affordability, prevention of rent gouging, security of tenure, equity, social diversity and integration, least cost production and respect for other social goals. Many of these objectives can be related to four characteristics of the rental market: rent levels, conservation of the existing rental stock, construction of new rental housing, and the vacany rate or degree of excess demand in the market. These last four characteristics are not valued for themselves, but they have a great influence on the degree to which the objectives of rental housing policy are achieved.

For the purposes of this paper, rental housing was said to be available if households can easily obtain accommodation suitable to their needs at the prevailing rent for housing of similar size and quality. The availability of rental housing was inversely related to the level of excess demand. Housing was said to be affordable for a given income group if the relevant households can rent adequate, uncrowded housing for less than a specified percentage of their gross income, usually 30 percent.

Rent gouging was defined for the purpose of the paper as a rapid increase in individual rents, although it is recognized that the popular conception of rent gouging also involves a concept of exploitation. It has been assumed throughout that there is a positive but imperfect correlation between the frequency of individual rent gouging episodes and the rate of increase in the general level of rents. Security of tenure was defined to be freedom from the threat of unreasonable eviction. Equity was a complex of considerations about horizontal equity, vertical equity, market justice and general "fairness".

Social diversity and integration can be considered at the level of a neighbourhood, such as the downtown core of large cities, or at the level of individual buildings and residential complexes. Early public housing projects were severely criticized for disrupting communities, isolating poor families and creating unhealthy social conditions. It is thus necessary to avoid excessive segregation by income group in rental housing. At a larger scale, many people obtain satisfaction from the safety and color of a vibrant downtown core.

Provision of rental housing at least cost is self explanatory. Finally, respect for other social goals required that housing policy not draw too heavily on the limited public budget available for social programs.

B. Performance Past and Present

Chapter II provided the empirical background for the remainder of the study. In it we examined first the evolution of the rental housing stock in Ontario since 1961, secondly the evolution of rents over the same period, and finally the performance of the rental housing market judged on our chosen criteria.

There are about 3 million occupied dwelling units in Ontario. About one third of them (37%) are rented. About 7 rental households in 10 occupy apartment buildings and duplexes. 15 percent of all rental dwellings are single detached houses. Thus it is a mistake to focus exclusively on apartments in discussing the rental market.

Tenant households have been generally rising as a fraction of all households, except for the period 1971 to 1976 when a significant shift towards ownership occurred. The rental market has experienced very high sustained growth rates in the past: between 1966 and 1971 the total rental stock grew by more than 40 thousand units per year for an average annual growth rate of almost 6 percent. It was suggested that it is a mistake to overemphasize how slowly the rental stock adjusts to new conditions.

Socially assisted housing has been of growing importance in the rental stock. Between 1961 and 1981 its share of the total rental stock has risen from 2.3 to 12.7 percent. It has accounted for a substantial fraction of the total growth in the rental stock: between 1971 and 1976 more than one new rental unit in three was socially assisted and between 1976 and 1981 this figure was one in five. Precise data for later years is not available.

Considerable concern has been expressed at the loss of low and medium rental dwelling units through demolition and conversion. Precise data are difficult to obtain. It appears that annual conversions and demolitions are a small fraction of the total stock but that they may be more significant in changing the composition of the stock from relatively modest to more expensive accommodation.

The available measures of rent levels all have serious deficiencies. It seems clear, however, that average rents (when expressed in current prices) have declined since 1973 and probably since 1961. Statistically, rent increases respond to past inflation with a considerable lag. Rapid rent increases follow low vacancy rates, again with a lag. Surprisingly, the presence of rent control does not appear to have greatly altered the statistical relationship between rent increases, inflation, and vacancy rates.

Turning to our criteria of economic performance, it appears that there is a clear problem of availability of rental housing. Measured vacancy rates are not precise measures of the overall availability of rental accommodation, but they are clearly much lower than their historical levels and below the level consistent with stable rents in an uncontrolled market.

Data on the affordability of rental housing are also difficult to interpret. Rent to income ratios are particularly deficient as a measure of affordability problems. A better concept is that of "core housing need". Between 150,000 and 200,000 Ontario renter households are estimated to be in core need. Core housing needs are overwhelmingly concentrated in the lowest quintile of the income distribution. Within that income group, families with children and elderly households have the highest incidence of need. Additional affordability problems arise among low income single people who, as boarders, lodgers, or hostel residents, are not counted as forming rental house-holds. Affordability problems are not concentrated in the largest CMA's and affordability problems appear to have declined substantially between 1974 and 1982, but the severe recession of 1983 and recent rises in real rents may have reversed this trend.

The central element in rent gouging is a rapid increase in nominal rents. The concepts of affordability and equity are closely associated with rent gouging in popular discussion, but are best treated separately for analytical purposes. Although the dating of rent gouging episodes differs with the measure of rent being used, it is clear that, since 1961, rents have risen rapidly in three episodes centred around 1966-68, 1974-76 and 1981-83. These episodes typically follow unanticipated bursts of inflation. Rent review does not prevent rapid increases in average rent levels, but it may prevent the most extreme cases of increases in the rent on individual units.

Security of tenure may be considered an objective of rental housing policy or a device to help achieve another objective, such as affordability. As an objective, security of tenure should be consided synonymous with freedom from arbitrary eviction: "economic eviction" by rising rent levels is properly considered under the heading of affordability. Tenants in Ontario enjoy very substantial protection from arbitrary eviction and the main problem may be excessive security of tenure: that is, it may be too difficult to remove irresponsible tenants.

Social diversity and integration is difficult to measure. Census data indicate that Toronto has been more successful than some other municipalities in spreading low income neighbourhoods throughout the city: there remain, however, clearly marked geographical areas with a high incidence of poor households. At the level of individual projects, there remain many large public housing projects built before 1970 in which there is little income integration, but this is less of a problem with the newer forms of socially assisted accommodation.

The present rental housing market exhibits a large number of horizontal inequities. Many of these are created by the present system of rent review, which discriminates against those unable to find accommodation at controlled rents and against investors in real estate. Other serious inequities are created by the fact that there are not enough public housing and rent-geared-to-income units to provide subsidized accommodation for all those who are eligible. Finally, although present rental policies provide significant benefits to their recipients, there is no evidence that they have made the income distribution significantly more progressive.

There is some evidence indicating that the public rental housing presently being built in Ontario under the non-profit and co-operative housing programs is not being produced at least cost.

Subsidies to rental housing are now a significant component of government expenditure. The federal share of these susidies is about 3% of the federal government's deficit. The major federal program provides a subsidy of over three quarters of the capital value of a new rental unit, with much of the subsidy devoted to subsidizing the rents of middle income tenants rather than the truly needy. It seems clear that the problem of affordability and availablity of rental housing cannot be met by expanding this program without seriously detracting from funds available for other social programs. Consequently we may conclude that the extent of public subsidies to housing raises a clear problem of respect for other social goals.

C. The Operation of the Market

Chapter III made explicit the theory or "model" of the housing market which lies behind the discussion of public policy in this submission. Although the housing market exhibits many special features (as do most other markets), the textbook model of perfect competition provides a powerful tool for understanding the fundamental forces operating in the market.

Rental housing services are supplied by landlords who use, as one of their inputs, the stock of existing housing. A central concept is the so-called "economic rent" which fully covers all the costs incurred by the landlord, including the revenues he has foregone by not selling his equity in land and buildings and investing the proceeds elsewhere. This economic rent can be calculated from the point of view of a prospective investor in new residential construction or from the point of view of the owners of the existing stock of housing. In the very long run in a perfectly stable market these two rents would be identical except for a perfectly foreseen quality differential as housing aged, but in practice they can differ significantly.

In this submission, it has generally been assumed that the economic rent is independent of the total quantity of rental housing. This simplifies the discussion without seriously affecting the conclusions and scanty empirical evidence suggests it does not depart grossly from the truth.

In the short run, rent levels are determined either by the intersection of short run demand and supply curves for rental housing at the "market clearing" rent or by a lower level set by binding rent controls. In the latter case there will always be a problem of availability of rental housing.

If the rent received by landlords is or is expected to be in excess of the economic rent on newly constructed units, there will be a tendency to expand the stock of rental housing. If it is in excess of the economic rent on the existing stock, efforts will be made to conserve and renovate that stock. Conversely, the housing stock will tend to contract whenever the actual rent is (or is expected to be) below the "economic" rent. In this case the housing stock shrinks because of demolitions and conversions and because there is very little or no new construction. This fact must be always borne in mind when analysing public policy towards rental housing.

The discussion of Chapter III further suggested that the competitive model could be extended without great difficulty to the discussion of maintenance expenditures and the parallel operation of a controlled and uncontrolled rental housing sector.

It is often argued that the model of perfect competition cannot be used to analyse the rental housing market because monopoly elements, imperfect information and transactions costs violate the assumptions of the model. It was argued in this study that the essential conclusions reached above are also obtained in more complicated models which take these difficulties into account. Furthermore it was judged that there are no empirical grounds for rejecting the competitive model of the basis on high concentration of sellers in the rental market.

Having accepted the model of perfect competition as a guide, we examined the values to be placed on the key parameters used in the model. Current surveys of the price elasticity of demand for rental housing place it in the neighbourhood of 0.5, although this clearly depends on family composition. No estimates are available of the elasticity of short run supply, but illustrative calculations suggest that the long run elasticity of supply may be around 8. This justifies our earlier assumption of a constant economic rent.

Finally, estimates of the economic rent depend very heavily on prevailing mortgage interest rates and on the tax system. Crude calculations indicate that economic rents on newly constructed units are more than 20% higher than prevailing rents. Some studies have estimated that rents in Ontario would rise by about 10% if the present system of rent control were removed. This suggests that, even in the absence of rent control, the present market clearing rent is too low to induce much new rental construction.

D. Future Problems

Chapter IV assessed probable developments on the demand and supply sides of the rental housing market. On the demand side, an independent projection of rental housing demands was made to complement the study prepared for the Inquiry by Foot. The main conclusions to be drawn from these projections is that population growth in Ontario will be fairly rapid (more than 2 percent per year) to 1991 and will then decline. New households are expected to increase at the rate of about 2 percent of the total each year.

Rental households will increase slightly less quickly. This growth will arise increasingly from an increase in the number of older households. These will account for more than 50 percent of the total increase after 1991. Similarly, two-thirds of the expected growth in rental households will occur in non-family households and in families without children.

The number of households in core housing need is likely to grow by about 4,000 per year to 1991. An increasing fraction (38% by 2001) of these households will be elderly.

On the supply side, future developments depend primarily on the effect of various policy variables on the level of the "economic" rent, on the speed of adjustment of the short run supply curve of rental housing, and on the extent of government intervention in the market.

A simple computational model was developed to examine how various characteristics of rent review and various assumptions about the rate of inflation and the resale value of property would affect the economic rent. The results indicate that, of the factors considered, the most important were the real interest rate, the expectation of capital gains upon resale of the rental unit, and the relationship between the statutory increase allowed under rent control and the rate of inflation. Although not explicitly considered, alterations in the tax treatment of depreciation on residential buildings also affect the level of economic rent.

Historical data show that, in an unconstrained market, the stock of rental housing can grow quite rapidly, provided the market rent exceeds the "economic" rent. However, it appears that the high real interest rates of the recent past may have elevated the economic rent above the market clearing rent which would have been observed in the absence of rent controls. Consequently interest focuses on how rapidly the stock of residential housing will contract. Very little specific information is available about the rate at which the existing rental housing stock can be demolished or converted. However there has been some speculation that it will be increasingly difficult for city councils to block such redevelopment by legal means.

Recent policy documents issued by the federal government have indicated considerable concern about the overall cost of housing programs and have emphasized a concept of the government acting as a facilitator rather than a substitute for the private market and there have been reports that the federal government wishes to transfer even more responsibility for the delivery of housing programs to the provinces. All of these developments suggest that the federal role in the direct provision of housing is unlikely to be extended and may be curtailed.

On the basis of this discussion, we attempted to predict the general trend of future developments given the present rental housing policies of the provincial government. If the present system is retained, it is likely that the controlled rent will continue to be below the full cost recovery ("economic") rent for most new and much of the existing housing stock. Consequently there will be very little new construction of rental buildings and there will be continued pressure to convert or demolish older buildings.

If this occurs, there will be a continuing lack of readily available rental accommodation. Affordability problems will also continue, since the current flow of socially assisted rental housing units will not be sufficient to accommodate the increase in the number of households in core housing need. Problems of equity may be exacerbated, since very low vacancy rates will make it easier for unscrupulous landlords or tenants to exploit others. Such rental housing that is built is likely to be predominantly socially assisted. Since there is evidence that such construction does not keep costs to a minimum the objective of least cost housing is likely to be compromised. Finally, the high subsidy of socially assisted housing is likely to add to tax burdens and reduce the government's ability to address other social concerns.

Maintenance of social diversity, prevention of rent gouging and security of tenure were judged unlikely to pose major problems under the current system of rent control.

E. Public Policies

In Chapter I of the study it was noted that one cannot generally achieve several objectives with a single policy instrument. In Chapter V we considered the various types of policy which might be used to complement a system of rent regulation.

Four major categories of policy were recognized. These were rent regulation, demand side subsidies, supply side subsidies, and the direct provision of rental housing by non-profit and co-operative agencies.

Three forms of rent regulation were examined. The present system of rent control is well known to the Inquiry. The key elements in this system are the annual rate of increase in rents which is permitted without appeal to the Rent Review Officers of the Residential Tenancy Commission, and the conditions under which increased costs can be passed through to tenants. The main anomaly in this system is that the owner's equity in land and buildings is not recognized when rent increases are calclulated. Thus when interest rates rise, a landlord is entitled to pass through increased interest costs on that portion of his investment which is financed by loans, but he is unable to realize the foregone earnings on the capital he has tied up in land and buildings. Consequently he sees the real value of his capital investment eroded by inflation.

Compared with a policy of no intervention, the present system of rent regulation was judged to lead to lower levels of rent, much less new construction of rental housing and more pressure for demolition and conversion. Under it problems of availability are much worse than they would have been but fewer households have affordability problems. There is more protection against rent gouging and security of tenure is about the same under a "hands-off" policy.

Again in comparison to a policy of non-intervention, the present system of rent regulation was judged inequitable. It had few effects on social diversity. It might raise the cost of supplying rental housing slightly, since incentives to economize on maintenance are reduced. Finally the current system does not involve significant tax costs.

An alternative to the present system of rent regulation would be to regulate the delivery of housing services so as to give suppliers a "fair rate of return", somewhat in the same manner as many public utilities are regulated. One such scheme has been proposed to the Inquiry by Quirin. Unfortunately, computation shows that Quirin's scheme, if applied to a single building, leads to a peculiar pattern of very high rents on new buildings and very low rents on older ones, since the scheme stabilizes net cash flow in nominal terms. This contrasts with the typical pattern of cash flows in an unregulated market, where projects may earn low or negative returns for some time before becoming highly profitable.

Compared to a policy of no intervention, a rent regulation scheme was judged to lead to somewhat higher rents in new buildings, somewhat less new construction, and somewhat less pressure to maintain the existing stock. Availability would be somewhat worse initially, but the same in the long run. Affordability problems would be somewhat greater on average, since rents would rise, but the effects would be mixed because of the dispersion of the resulting rents. There would be greater protection from rent gouging.

Security of tenure would be similar. Equity would be comparable to "hands off" policy, except that the result might be perceived as fairer according to some criteria. Finally, the cost of production might be elevated due to the ease of passing on cost increases. Once again, the cost to the public purse is low.

A final variant on rent regulation is a scheme of rent arbitration. Such schemes are in effect in Quebec, England and elsewhere. Ideally, such a scheme would not attempt to influence the general level of rents, but would provide a mechanism for resolving disputes between individual landlords and tenants. Vacant apartments would not be controlled.

Compared with a system of no intervention, a rent arbitration scheme would have very similar effects on the general level of rents, new construction and the preservation of the existing stock. Under both schemes affordability problems would be greater and availability problems would be less than under the present scheme of rent control. Individual cases of rent gouging could be better prevented under an arbitration scheme and the results might be viewed as more equitable than those of a hands off system. Security of tenure, social diversity, and cost of production would be similar under both schemes. The arbitration scheme would also have a low tax cost.

A second set of rental housing policies operate on the demand side of the market. These policies directly attack the problem of affordability by increasing household income.

The assistance may be independent of housing consumption, as in many proposed schemes for shelter allowances, tied to the consumption of a minimum standard of housing or payment of a minimum rent, or tied to the consumption of a specific rental unit as in the rent supplement program of the federal government.

Demand side policies are predicted to increase the consumption of housing by subsidized households, raise the general rent level, and decrease consumption of non-subsidized households. Empirical evidence, mainly from the United States, has found extremely little evidence of the expected increase in rents. Demand side programs are also expected to encourage the conservation of the existing stock of housing and to promote new construction, provided there are no binding rent controls.

Compared with a policy of no intervention, demand side policies are predicted to increase affordability and to decrease availability slightly (until the supply of housing services increases sufficiently). Opportunities for rent gouging are perhaps increased in the short run. Security of tenure is fundamentally unchanged, except that poorer households have more economic security. Unconstrained demand side programs are particularly equitable in treating all eligible households equally. Social diversity and the cost of production are expected to be about the same.

The tax cost of demand side policies can be very high. The annual cost of a program to eliminate affordability problems for all Ontario households in core housing need would cost up to $180 million annually. Restrictions on eligibility and on the maximum assistance payable could reduce this estimate significantly. Rent supplement programs which are tied to individual units allow more financial control at the expense of the horizontal equity advantages of shelter allowance and income maintenance schemes.

A third set of rental housing policies alter the incentives faced by private entrepreneurs who supply rental housing. Examples are capital or interest rate subsidies and changes in income or property tax treatment. Usually such schemes involve a reduction in the capital cost of supplying housing from newly constructed stock.

Most supply side policies operate by forcing down rent levels through the construction of new housing. Their benefit to consumers is thus delayed until shifts in the stock of rental housing also occur. Moreover, since these supply side policies tend to depress rents on the existing stock of rental housing, they discourage conservation of the existing stock. Finally, supply side policies cannot permanently reduce the level of rents unless they are permanently applied. If this is done, subsidized new construction will gradually, over a period of decades, displace the entire unsubsidized rental housing stock.

Compared with a system of no intervention, supply side policies are judged to increase availability in the short run but not in the long. They tend to improve affordability somewhat by reducing rent levels generally. Their effects on rent gouging, security of tenure and social diversity are comparable to those of a hands off policy. They are judged less equitable than a non-interventionist policy because the benefits of rent reductions accrue to all income groups including those who do not require assistance. They may encourage higher construction costs. Finally they imply a tax burden. In the absence of binding rent control, reduction of rent levels by approximately 14 per cent would require an initial subsidy of the order of $84 million annually. This would grow in size as existing housing was displaced.

The final set of policies considered involves the direct provision of housing by municipal, non-profit or co-operative agencies. Such projects have evolved from early post-war slum clearance schemes, which involved 100% rent geared to income housing, to the present schemes under section 56.1 of the NHA, in which deeply subsidized tenants are mixed with those paying "lower end of the market rates".

A major distinction should be made between schemes which purchase and renovate the existing rental stock for the purpose of directly providing housing and those schemes which are based on new construction. The general effect of the former is to raise rent levels and encourage both new construction and the conservation of the existing stock. The latter tend to depress rents and discourage new construction and conservation. Another difference is that social diversity can be obtained much more economically through the purchase of existing housing.

Both types of policy are judged to be horizontally inequitable, since not all those eligible obtain assistance. In comparison with a scheme of no intervention, the cost of providing comparable housing services may be reduced when they are produced by private non-profit agencies operating with the existing stock. Newly constructed housing under these schemes tends to be more expensive. Finally, the tax cost of schemes based on new housing is high because of the need to subsidize middle income tenants so as to ensure social integration of the assisted tenants. The cost of schemes based on the existing stock is less.

F. Policy Menus

The most serious rental housing problems presently facing Ontario are a lack of affordable housing for low income households and a generalized shortage of rental accommodation for all groups. The present form of rent regulation alleviates the affordability problem but has contributed to the lack of availability. In addition the present system is inequitable towards landlords with an extensive equity investment in their properties and towards tenants who are unable to find suitable accommodation.

To achieve its housing goals, therefore, the Province of Ontario must choose between two grand strategies. On the one hand, it can retain the existing form of rent control and attempt to remedy the problems associated with the lack of availability by pursuing complementary policies designed to promote new construction and conserve the existing stock. On the other it can modify the system of rent control to allow all landlords to recover the full cost of supplying rental housing, thus alleviating the availability problem, while pursuing complementary policies designed to help poorer households cope with the high cost of rental accommodation. In Chapter VI we explored the advantages and disadvantages of each strategy.

Should the province choose to maintain the present system of rent controls, there is really only one complementary policy which it can adopt: the direct provision of rental housing from newly constructed stock. If this strategy were pursued with sufficient vigour, the province could attain its rental housing objectives of affordability and availability. This achievement would come at the cost of increasing pressure for demolition and conversion of the existing stock, continued inequities toward landlords and some tenants, and most importantly, at an extremely high cost to the public purse.

Should the province wish to liberalize its system of rent regulation, there are at least three options short of complete abolition. One is to modify the statutory increase provisions of the present system to allow the gradual restoration of market clearing rent and subsequently to guarantee that the guideline is at least equal to the rate of inflation. Another is to attempt to regulate the provision of public housing in the manner of a public utility and the final one is to opt for a system of rent arbitration designed to deal with individual complaints. In this submission, it was judged that liberalized guidelines for statutory rent increases formed the superior option. Liberalized guidelines would lead to essentially the same results as a "hands off" policy except that opportunities for "gouging" individual tenants would be reduced. They would also lead to the same decreases in affordability that a hands off policy would incur.

To deal with increased affordability problems, the Province could choose one or more policies from the remaining columns of Table 6A.1: demand side subsidies such as shelter allowances, supply side measures such as construction subsidies or tax breaks, or direct provision of rental housing from newly constructed or existing stock.

A liberalized scheme of rent review combined with a program of income maintenance or shelter allowances could eliminate the current lack of availability of rental housing and at the same time alleviate the rent burden borne by poorer households. Such a program could be part of a generalized income security plan as proposed by the MacDonald Commission. At the same time, such a combined program would tend to encourage new rental construction in the private sector and promote the conservation of the existing housing stock. It was also viewed as horizontally equitable. The major difficulty would be a high tax cost, but this is a characteristic shared by all programs which attempt to deal seriously with the affordability problem.

A liberalized scheme of rent review could be combined with supply side subsidies, such as grants or tax breaks on new construction. Because these operate with a lag and operate by depressing the general rent level, this combination of policies was judged less effective in dealing with affordability than the combination of rent arbitration and demand side policies. It was also judged less equitable and prone to encourage wasteful practices in the production of housing. The tax cost of this combination of programs would initially be comparable to that of the arbitration/demand side option, but the costs would increase as the existing housing stock was gradually replaced by subsidized new construction.

A liberalized scheme of rent review combined with direct provision of rental housing to low income families would solve the main problems of availability of rental housing and would help some poorer households attain affordable accommodation. On balance, a scheme based on the aquisition of existing ownership stock would be preferable, since it encourages the conservation of the existing stock, can ensure social diversity and integration and has a lower tax cost. Neither program, however, successfully addresses the affordability problem of those unable to find accommoation in the public projects and hence both might be judged somewhat inequitable.

Finally, one might consider a three pronged strategy involving liberalized rent regulation, demand side policies such as a universal shelter allowance and the continuation of a policy of direct provision of rental housing. Such a strategy could achieve most of the objectives for rental housing but would incur significant tax costs. Because rents would approach market clearing levels, there would be no problem of availability. Affordability would be guaranteed by the shelter allowance, and social diversity and integration would be maintained and expanded through the direct provision of rental housing based on the aquisition of existing units dispersed through the community.

If an income maintenance scheme were adopted, a major problem under this approach would be the possibility of doubly subsidizing the occupants of directly provided housing. One solution to this problem would require all non-profit and co-operative agencies to operate on a full cost recovery basis. Unfortunately this would seriously limit the incentive for such groups to form. The problem is less severe if the demand side component is a shelter allowance geared to actual rents paid or a rent supplement.

G. Conclusions

It is not the purpose of this paper to recommend a specific course of action to the Inquiry. It is hoped, rather, that this submission will have clarified the options available to the province in meeting its rental housing objectives.

This paper has attempted to address three fundamental questions:

i. what problems are most likely to emerge in attempting to meet rental housing policy objectives over the next 15 to 20 years,

ii. to what extent can these problems be solved by private and public initiatives, assuming the continuation of rent regulation in its present form, and

iii. how would alternative forms of rent regulation and complementary policies affect the economy's ability to meet these objectives?

It is hoped that this goal has been accomplished in the course of the study. At the risk of oversimplification, our answers have been as follows.

i. Assuming the continuation of the present form of rent regulation, the difficulties most likely to emerge over the next 15 years are a continued lack of available rental accommodation, persistent problems of affordability, public demand for the direct provision of rental housing through non-market means and difficulties in accomplishing the conversion of the existing rental stock to the needs of older households.

ii. Assuming the continuation of rent regulation in its present form, the ability of the private market to cope with these difficulties is limited because the present scheme impedes or prevents landlords from covering the full costs of providing rental accommodation, including the earnings foregone by not investing their capital elsewhere. Public initiatives to solve this problem are limited because any supply side scheme designed to maintain rents below the full cost recovery level must eventually displace all unsubsidized rental accommodation and because demand side policies cannot solve the availability problem if rents are prevented from clearing the market.

iii. The economy's ability to meet rental housing objectives could be greatly enhanced by pursuing policies designed to allow landlords to cover the full costs of their investment while simultaneously directly attacking the problem of affordability for lower income groups.

APPENDIX A: SENSITIVITY TESTS ON ECONOMIC RENTS

TABLE A.1: BASE CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization		
Equity	10000	Years	30	
Mortage	54000	Mortage Payment/mo	597	
Mortgage Interest	0.13	Real Salvage Value	20000	(base $)
Return on Equity	0.10			
Initial Rent	592	Summary Results:		
Stat.Increase	0.04	Internal Rate of Return		0.100
Intial Operating Cost/mo	200	PV of Cash Flow		0.401076
		PV of Salvage Value		3717
Cost Inflation	0.04	Salvage Value		64868
CPI Inflation	0.04	Next Approximation		592.1754

Year	Rental Revenue	Operating Costs	Mortgage Payments		Cash Flow	Statutory Increase	Cost Pass-Through
0				10000	-10000		
1	7106	2400	7168		-2462		
2	7390	2496	7168		-2274	284	96
3	7686	2596	7168		-2078	296	100
4	7993	2700	7168		-1874	307	104
5	8313	2808	7168		-1663	320	108
6	8646	2920	7168		-1442	333	112
7	8992	3037	7168		-1213	346	117
8	9351	3158	7168		-975	360	121
9	9725	3285	7168		-727	374	126
10	10114	3416	7168		-470	389	131
11	10519	3553	7168		-202	405	137
12	10940	3695	7168		77	421	142
13	11377	3842	7168		367	438	148
14	11832	3996	7168		668	455	154
15	12306	4156	7168		981	473	160
16	12798	4322	7168		1307	492	166
17	13310	4495	7168		1646	512	173
18	13842	4675	7168		1999	532	180
19	14396	4862	7168		2366	554	187
20	14972	5056	7168		2747	576	194
21	15570	5259	7168		3144	599	202
22	16193	5469	7168		3556	623	210
23	16841	5688	7168		3985	648	219
24	17515	5915	7168		4431	674	228
25	18215	6152	7168		4895	701	237
26	18944	6398	7168		5378	729	246
27	19702	6654	7168		5879	758	256
28	20490	6920	7168		6401	788	266
29	21309	7197	7168		6944	820	277
30	22162	7485	7168	-64868	72377	852	288

TABLE A.2: LOW INTEREST RATE CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization		
Equity	10000	Years	30	
Mortage	54000	Mortage Payment/mo	514	
Mortgage Interest	0.11	Real Salvage Value	20000	(base $)
Return on Equity	0.10			
Initial Rent	534	Summary Results:		
Stat.Increase	0.04	Internal Rate of Return		0.100
Intial Operating Cost/mo	200	PV of Cash Flow		-0.00000
		PV of Salvage Value		3717
Cost Inflation	0.04	Salvage Value		64868
CPI Inflation	0.04	Next Approximation		534.4479

Year	Rental Revenue	Opera-ting Costs	Mortgage Payments		Cash Flow	Stat-utory Increase	Cost Pass-Through
0				10000	-10000		
1	6413	2400	6171		-2158		
2	6670	2496	6171		-1997	257	96
3	6937	2596	6171		-1830	267	100
4	7214	2700	6171		-1657	277	104
5	7503	2808	6171		-1476	267	106
6	7803	2920	6171		-1288	300	112
7	8115	3037	6171		-1093	312	117
8	8440	3158	6171		-890	325	121
9	8777	3285	6171		-678	338	126
10	9128	3416	6171		-459	351	131
11	9493	3553	6171		-230	365	137
12	9873	3695	6171		7	380	142
13	10268	3842	6171		254	395	148
14	10679	3996	6171		512	411	154
15	11106	4156	6171		779	427	160
16	11550	4322	6171		1057	444	166
17	12012	4495	6171		1346	462	173
18	12493	4675	6171		1647	480	180
19	12992	4862	6171		1959	500	187
20	13512	5056	6171		2285	520	194
21	14052	5259	6171		2623	540	202
22	14615	5469	6171		2974	562	210
23	15199	5688	6171		3340	585	219
24	15807	5915	6171		3721	608	228
25	16439	6152	6171		4116	632	237
26	17097	6398	6171		4528	658	246
27	17781	6654	6171		4956	684	256
28	18492	6920	6171		5401	711	266
29	19232	7197	6171		5864	740	277
30	20001	7485	6171	-64368	71213	769	288

TABLE A.3: LOW INFLATION CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization	
Equity	10000	Years	30
Mortage	54000	Mortage Payment/mo	514
Mortgage Interest	0.11	Real Salvage Value	20000 (base $)
Return on Equity	0.08		
Initial Rent	602	Summary Results:	
Stat.Increase	0.02	Internal Rate of Return	0.080
Initial Operating Cost/mo	200	PV of Cash Flow	-0.17651
		PV of Salvage Value	3600
Cost Inflation	0.02	Salvage Value	36227
CPI Inflation	0.02	Next Approximation	601.6647

Year	Rental Revenue	Operating Costs	Mortgage Payments		Cash Flow	Statutory Increase	Cost Pass-Through
0				10000	-10000		
1	7220	2400	6171		-1351		
2	7364	2448	6171		-1255	144	48
3	7512	2497	6171		-1156	147	49
4	7662	2547	6171		-1056	150	50
5	7815	2598	6171		-954	153	51
6	7971	2650	6171		-849	156	52
7	8131	2703	6171		-743	159	53
8	8293	2757	6171		-634	163	54
9	8459	2812	6171		-524	166	55
10	8629	2868	6171		-411	169	56
11	8801	2926	6171		-296	173	57
12	8977	2984	6171		-178	176	59
13	9157	3044	6171		-58	180	60
14	9340	3105	6171		64	183	61
15	9527	3167	6171		189	187	62
16	9717	3230	6171		316	191	63
17	9911	3295	6171		446	194	65
18	10110	3361	6171		578	198	66
19	10312	3428	6171		713	202	67
20	10518	3496	6171		851	206	69
21	10728	3566	6171		991	210	70
22	10943	3638	6171		1134	215	71
23	11162	3710	6171		1280	219	73
24	11385	3785	6171		1430	223	74
25	11613	3860	6171		1582	228	76
26	11845	3937	6171		1737	232	77
27	12082	4016	6171		1895	237	79
28	12324	4097	6171		2056	242	80
29	12570	4178	6171		2221	246	82
30	12822	4262	6171	-36227	38616	251	84

TABLE A.4: HIGH RETURN ON EQUITY CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000
Equity	10000
Mortage	54000
Mortgage Interest	0.13
Return on Equity	0.13
Initial Rent	626
Stat.Increase	0.04
Initial Operating Cost/mo	200
Cost Inflation	0.04
CPI Inflation	0.04

Amortization Years	30
Mortage Payment/mo	597
Real Salvage Value	20000 (base $)

Summary Results:

Internal Rate of Return	0.130
PV of Cash Flow	1.4E-11
PV of Salvage Value	1658
Salvage Value	64868
Next Approximation	625.8487

Year	Rental Revenue	Operating Costs	Mortgage Payments		Cash Flow	Statutory Increase	Cost Pass-Through
0				10000	-10000		
1	7510	2400	7168		-2058		
2	7811	2496	7168		-1854	300	96
3	8123	2596	7168		-1641	312	100
4	8448	2700	7168		-1420	325	104
5	8786	2808	7168		-1190	338	108
6	9137	2920	7168		-951	351	112
7	9503	3037	7168		-702	365	117
8	9883	3158	7168		-444	380	121
9	10278	3285	7168		-175	395	126
10	10689	3416	7168		105	411	131
11	11117	3553	7168		396	428	137
12	11562	3695	7168		699	445	142
13	12024	3842	7168		1013	462	148
14	12505	3996	7168		1341	481	154
15	13005	4156	7168		1681	500	160
16	13525	4322	7168		2035	520	166
17	14066	4495	7168		2403	541	173
18	14629	4675	7168		2786	563	180
19	15214	4862	7168		3184	585	187
20	15823	5056	7168		3598	609	194
21	16456	5259	7168		4029	633	202
22	17114	5469	7168		4477	658	210
23	17799	5688	7168		4943	685	219
24	18510	5915	7168		5427	712	228
25	19251	6152	7168		5931	740	237
26	20021	6398	7168		6455	770	246
27	20822	6654	7168		7000	801	256
28	21655	6920	7168		7566	833	266
29	22521	7197	7168		8156	866	277
30	23422	7485	7168	-64868	73637	901	288

TABLE A.5: LOW STATUATORY INCREASE CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization		
Equity	10000	Years	30	
Mortage	54000	Mortage Payment/mo	597	
Mortgage Interest	0.13	Real Salvage Value	20000	(base $)
Return on Equity	0.10			
Initial Rent	653	Summary Results:		
Stat.Increase	0.03	Internal Rate of Return		0.100
Intial Operating Cost/mo	200	PV of Cash Flow		-0.00016
		PV of Salvage Value		3717
Cost Inflation	0.04	Salvage Value		64868
CPI Inflation	0.04	Next Approximation		653.3388

Year	Rental Revenue	Opera-ting Costs	Mortgage Payments		Cash Flow	Stat-utory Increase	Cost Pass-Through
0				10000	-10000		
1	7840	2400	7168		-1728		
2	8075	2496	7168		-1589	235	96
3	8318	2596	7168		-1446	242	100
4	8567	2700	7168		-1301	250	104
5	8824	2808	7168		-1152	257	108
6	9089	2920	7168		-999	265	112
7	9361	3037	7168		-843	273	117
8	9642	3158	7168		-684	281	121
9	9932	3285	7168		-521	289	126
10	10230	3416	7168		-355	298	131
11	10536	3553	7168		-184	307	137
12	10852	3695	7168		-10	316	142
13	11178	3842	7168		167	326	148
14	11513	3996	7168		349	335	154
15	11859	4156	7168		535	345	160
16	12215	4322	7168		724	356	166
17	12581	4495	7168		918	366	173
18	12958	4675	7168		1115	377	180
19	13347	4862	7168		1317	389	187
20	13748	5056	7168		1523	400	194
21	14160	5259	7168		1733	412	202
22	14585	5469	7168		1948	425	210
23	15022	5688	7168		2166	438	219
24	15473	5915	7168		2390	451	228
25	15937	6152	7168		2617	464	237
26	16415	6398	7168		2849	478	246
27	16908	6654	7168		3086	492	256
28	17415	6920	7168		3327	507	266
29	17938	7197	7168		3572	522	277
30	18476	7485	7168	-64868	63691	538	288

TABLE A.6: HIGH INFLATION CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization	
Equity	10000	Years	30
Mortage	54000	Mortage Payment/mo	683
Mortgage Interest	0.15	Real Salvage Value	20000 (base $)
Return on Equity	0.10		
Initial Rent	681	Summary Results:	
Stat.Increase	0.04	Internal Rate of Return	0.100
Intial Operating Cost/mo	200	PV of Cash Flow	0.000003
		PV of Salvage Value	6583
Cost Inflation	0.06	Salvage Value	114870
CPI Inflation	0.06	Next Approximation	681.1495

Year	Rental Revenue	Opera-ting Costs	Mortgage Payments		Cash Flow	Stat-utory Increase	Cost Pass-Through
0				10000	-10000		
1	8174	2400	8194		-2420		
2	8501	2544	8194		-2237	327	144
3	8841	2697	8194		-2049	340	153
4	9194	2858	8194		-1858	354	162
5	9562	3030	8194		-1661	368	172
6	9945	3212	8194		-1461	382	182
7	10342	3404	8194		-1256	398	193
8	10756	3609	8194		-1046	414	204
9	11186	3825	8194		-832	430	217
10	11634	4055	8194		-614	447	230
11	12099	4298	8194		-392	465	243
12	12583	4556	8194		-166	484	258
13	13087	4829	8194		64	503	273
14	13610	5119	8194		297	523	290
15	14154	5426	8194		535	544	307
16	14721	5752	8194		775	566	326
17	15309	6097	8194		1019	589	345
18	15922	6463	8194		1265	612	366
19	16559	6850	8194		1515	637	388
20	17221	7261	8194		1766	662	411
21	17910	7697	8194		2019	689	436
22	18626	8159	8194		2274	716	462
23	19371	8648	8194		2529	745	490
24	20146	9167	8194		2785	775	519
25	20952	9717	8194		3041	806	550
26	21790	10300	8194		3296	838	583
27	22662	10919	8194		3549	872	618
28	23568	11574	8194		3801	906	655
29	24511	12268	8194		4049	943	694
30	25491	13004	8194	-114870	119163	980	736

TABLE A.7: HIGH INFLATION HIGH RETURN ON EQUITY CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization		
Equity	10000	Years	30	
Mortage	54000	Mortage Payment/mo	683	
Mortgage Interest	0.15	Real Salvage Value	20000	(base $)
Return on Equity	0.12			
Initial Rent	706	Summary Results:		
Stat.Increase	0.04	Internal Rate of Return		0.120
Initial Operating Cost/mo	200	PV of Cash Flow		-0.00000
		PV of Salvage Value		3834
Cost Inflation	0.06	Salvage Value		114870
CPI Inflation	0.06	Next Approximation		706.4716

Year	Rental Revenue	Operating Costs	Mortgage Payments		Cash Flow	Statutory Increase	Cost Pass-Through
0				10000	-10000		
1	8478	2400	8194		-2116		
2	8817	2544	8194		-1921	339	144
3	9169	2697	8194		-1721	353	153
4	9536	2853	8194		-1516	367	162
5	9918	3030	8194		-1306	381	172
6	10314	3212	8194		-1091	397	182
7	10727	3404	8194		-871	413	193
8	11156	3609	8194		-646	429	204
9	11602	3825	8194		-417	446	217
10	12066	4055	8194		-182	464	230
11	12549	4298	8194		57	483	243
12	13051	4556	8194		301	502	258
13	13573	4829	8194		550	522	273
14	14116	5119	8194		803	543	290
15	14681	5426	8194		1061	565	307
16	15268	5752	8194		1322	587	326
17	15878	6097	8194		1588	611	345
18	16514	6463	8194		1857	635	366
19	17174	6850	8194		2130	661	368
20	17861	7261	8194		2406	687	411
21	18576	7697	8194		2685	714	436
22	19319	8159	8194		2966	743	462
23	20091	8648	8194		3249	773	490
24	20895	9167	8194		3534	804	519
25	21731	9717	8194		3820	836	550
26	22600	10300	8194		4106	869	583
27	23504	10919	8194		4392	904	616
28	24444	11574	8194		4677	940	655
29	25422	12268	8194		4960	978	694
30	26439	13004	8194	-114870	120111	1017	736

TABLE A.8: HIGH INFLATION, GUIDELINE AND RETURN ON EQUITY

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization		
Equity	10000	Years	30	
Mortage	54000	Mortage Payment/mo	663	
Mortgage Interest	0.15	Real Salvage Value	20000	(base $)
Return on Equity	0.12			
Initial Rent	585	Summary Results:		
Stat.Increase	0.06	Internal Rate of Return		0.120
Initial Operating Cost/mo	200	PV of Cash Flow		0.025218
		PV of Salvage Value		3834
Cost Inflation	0.06	Salvage Value		114870
CPI Inflation	0.06	Next Approximation		584.5555

Year	Rental Revenue	Operating Costs	Mortgage Payments		Cash Flow	Statutory Increase	Cost Pass-Through
0				10000	-10000		
1	7015	2400	8194		-3579		
2	7436	2544	8194		-3302	421	144
3	7882	2697	8194		-3009	446	153
4	8355	2858	8194		-2697	473	162
5	8856	3030	8194		-2366	501	172
6	9387	3212	8194		-2018	531	182
7	9950	3404	8194		-1648	563	193
8	10547	3609	8194		-1255	597	204
9	11180	3825	8194		-839	633	217
10	11851	4055	8194		-397	671	230
11	12562	4298	8194		71	711	243
12	13316	4556	8194		566	754	258
13	14115	4829	8194		1092	799	273
14	14962	5119	8194		1649	847	290
15	15859	5426	8194		2240	898	307
16	16811	5752	8194		2866	952	326
17	17820	6097	8194		3529	1009	345
18	18889	6463	8194		4233	1069	366
19	20022	6850	8194		4978	1133	388
20	21224	7261	8194		5769	1201	411
21	22497	7697	8194		6606	1273	436
22	23847	8159	8194		7494	1350	462
23	25278	8648	8194		8436	1431	490
24	26794	9167	8194		9433	1517	519
25	28402	9717	8194		10491	1608	550
26	30106	10300	8194		11612	1704	583
27	31912	10919	8194		12800	1806	618
28	33827	11574	8194		14060	1915	655
29	35857	12268	8194		15395	2030	694
30	38008	13004	8194	-114870	131680	2151	736

TABLE A.9: HIGH SALVAGE VALUE CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000	Amortization	
Equity	10000	Years	30
Mortage	54000	Mortage Payment/mo	597
Mortgage Interest	0.13	Real Salvage Value	64000 (base $)
Return on Equity	0.10		
Initial Rent	542	Summary Results:	
Stat.Increase	0.04	Internal Rate of Return	0.100
Initial Operating Cost/mo	200	PV of Cash Flow	0.362955
		PV of Salvage Value	11696
Cost Inflation	0.04	Salvage Value	207577
CPI Inflation	0.04	Next Approximation	541.9469

Year	Rental Revenue	Opera-ting Costs	Mortgage Payments		Cash Flow	Stat-utory Increase	Cost Pass-Through
0				10000	-10000		
1	6503	2400	7168		-3065		
2	6764	2496	7168		-2901	260	96
3	7034	2596	7168		-2730	271	100
4	7315	2700	7168		-2552	281	104
5	7608	2808	7168		-2368	293	108
6	7912	2920	7168		-2176	304	112
7	8229	3037	7168		-1976	316	117
8	8558	3158	7168		-1768	329	121
9	8900	3285	7168		-1552	342	126
10	9256	3416	7168		-1328	356	131
11	9627	3553	7168		-1094	370	137
12	10012	3695	7168		-851	385	142
13	10412	3842	7168		-598	400	148
14	10829	3996	7168		-336	416	154
15	11262	4156	7168		-62	433	160
16	11712	4322	7168		222	450	166
17	12181	4495	7168		517	468	173
18	12668	4675	7168		825	487	180
19	13175	4862	7168		1145	507	187
20	13702	5056	7168		1477	527	194
21	14250	5259	7168		1823	548	202
22	14820	5469	7168		2183	570	210
23	15413	5688	7168		2557	593	219
24	16029	5915	7168		2946	617	228
25	16670	6152	7168		3350	641	237
26	17337	6398	7168		3771	667	246
27	18031	6654	7168		4208	693	256
28	18752	6920	7168		4663	721	266
29	19502	7197	7168		5137	750	277
30	20282	7485	7168	-207577	213206	780	288

TABLE A.10: HIGH RETURN ON EQUITY AND LOW INTEREST RATE CASE

Worksheet to Calculate Economic Rents Under Ontario Rent Review

Capital Cost	64000
Equity	10000
Mortage	54000
Mortgage Interest	0.11
Return on Equity	0.13
Initial Rent	535
Stat.Increase	0.04
Initial Operating Cost/mo	200
Cost Inflation	0.04
CPI Inflation	0.04

Amortization		
Years	30	
Mortage Payment/mo	514	
Real Salvage Value	64000 (base $)	
Summary Results:		
Internal Rate of Return		0.130
PV of Cash Flow		-2.3E-12
PV of Salvage Value		5307
Salvage Value		207577
Next Approximation		534.8883

Year	Rental Revenue	Opera-ting Costs	Mortgage Payments		Cash Flow	Stat-utory Increase	Cost Pass-Through
0				10000	-10000		
1	6419	2400	6171		-2152		
2	6675	2496	6171		-1992	257	96
3	6942	2596	6171		-1824	267	100
4	7220	2700	6171		-1651	278	104
5	7509	2808	6171		-1470	289	108
6	7809	2920	6171		-1282	300	112
7	8122	3037	6171		-1086	312	117
8	8447	3158	6171		-883	325	121
9	8784	3285	6171		-671	338	126
10	9136	3416	6171		-451	351	131
11	9501	3553	6171		-222	365	137
12	9881	3695	6171		15	380	142
13	10276	3842	6171		263	395	148
14	10688	3996	6171		520	411	154
15	11115	4156	6171		788	428	160
16	11560	4322	6171		1066	445	166
17	12022	4495	6171		1356	462	173
18	12503	4675	6171		1657	481	180
19	13003	4862	6171		1970	500	187
20	13523	5056	6171		2296	520	194
21	14064	5259	6171		2634	541	202
22	14627	5469	6171		2987	563	210
23	15212	5688	6171		3353	585	219
24	15820	5915	6171		3734	608	228
25	16453	6152	6171		4130	633	237
26	17111	6398	6171		4542	658	246
27	17796	6654	6171		4971	684	256
28	18507	6920	6171		5416	712	266
29	19248	7197	6171		5880	740	277
30	20018	7485	6171	-207577	213939	770	288

APPENDIX B: SUPPORTING CALCULATIONS FOR TABLE 3.8

CALCULATION OF INTERNAL RATE OF RETURN FOR GORING

LOW INFLATION, STATUTORY RATE = RATE OF INFLATION

Capital Cost	57385	Amortization period (years)	30
Equity	14346		
Mortgage	43039	Monthly Mortgage Pmt.	402
Mortgage Interest	0.1075	Resale Value (base year $)	20000
Allowed Return on Equity	0.1275		
Initial Rent	720.00	SUMMARY OF RESULTS	
Initial Operating Cost per Month	232.25	Internal Rate of Return	0.1828
Cost Inflation	0.0400	Future Resale Value	64868
CPI Inflation	0.0400	PV of Resale Value	1772
Statutory Increase	0.0400	Next Approximation	668.5123

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	8640	2787	4821		1032	720	720
2	8986	2898	4821		1266	749	720
3	9345	3014	4821		1509	779	720
4	9719	3135	4821		1763	810	720
5	10108	3260	4821		2026	842	720
6	10512	3391	4821		2300	876	720
7	10932	3526	4821		2585	911	720
8	11370	3668	4821		2881	947	720
9	11824	3814	4821		3189	985	720
10	12297	3967	4821		3510	1025	720
11	12789	4125	4821		3843	1066	720
12	13301	4290	4821		4189	1108	720
13	13833	4462	4821		4550	1153	720
14	14386	4641	4821		4925	1199	720
15	14962	4826	4821		5314	1247	720
16	15560	5019	4821		5720	1297	720
17	16183	5220	4821		6141	1349	720
18	16830	5429	4821		6580	1402	720
19	17503	5646	4821		7036	1459	720
20	18203	5872	4821		7510	1517	720
21	18931	6107	4821		8004	1578	720
22	19689	6351	4821		8516	1641	720
23	20476	6605	4821		9050	1706	720
24	21295	6869	4821		9605	1775	720
25	22147	7144	4821		10182	1846	720
26	23033	7430	4821		10782	1919	720
27	23954	7727	4821		11406	1996	720
28	24912	8036	4821		12055	2076	720
29	25909	8357	4821		12730	2159	720
30	26945	8692	4821	-64868	78300	2245	720

CALCULATION OF INTERNAL RATE OF RETURN FOR GORING

LOW INFLATION, STATUTORY RATE = RATE OF INFLATION

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	8640	346	111	346	8986	1.0400
3	8986	359	116	359	9345	1.0816
4	9345	374	121	374	9719	1.1249
5	9719	389	125	389	10108	1.1699
6	10108	404	130	404	10512	1.2167
7	10512	420	136	420	10932	1.2653
8	10932	437	141	437	11370	1.3159
9	11370	455	147	455	11824	1.3686
10	11824	473	153	473	12297	1.4233
11	12297	492	159	492	12789	1.4802
12	12789	512	165	512	13301	1.5395
13	13301	532	172	532	13833	1.6010
14	13833	553	178	553	14386	1.6651
15	14386	575	186	575	14962	1.7317
16	14962	598	193	598	15560	1.8009
17	15560	622	201	622	16183	1.8730
18	16183	647	209	647	16830	1.9479
19	16830	673	217	673	17503	2.0258
20	17503	700	226	700	18203	2.1068
21	18203	728	235	728	18931	2.1911
22	18931	757	244	757	19689	2.2788
23	19689	788	254	788	20476	2.3699
24	20476	819	264	819	21295	2.4647
25	21295	852	275	852	22147	2.5633
26	22147	886	286	886	23033	2.6658
27	23033	921	297	921	23954	2.7725
28	23954	958	309	958	24912	2.8834
29	24912	996	321	996	25909	2.9987
30	25909	1036	334	1036	26945	3.1187

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = RATE OF INFLATION, 2 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1075
Allowed Return on Equity	0.1275
Initial Rent	627.11
Initial Operating Cost per Month	232.25
Cost Inflation	0.0400
CPI Inflation	0.0400
Statutory Increase	0.0400

Amortization period (years)	30
Monthly Mortgage Pmt.	402
Resale Value (base year $)	20000

SUMMARY OF RESULTS

Internal Rate of Return	0.1275
PV of Cash Flow	.0000
Future Resale Value	64868
PV of Resale Value	1772
Next Approximation	627.1088

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	7525	2787	4821		-83	627	627
2	7826	2898	4821		107	652	627
3	8139	3014	4821		304	678	627
4	8465	3135	4821		509	705	627
5	8804	3260	4821		722	734	627
6	9156	3391	4821		944	763	627
7	9522	3526	4821		1174	793	627
8	9903	3668	4821		1414	825	627
9	10299	3814	4821		1664	858	627
10	10711	3967	4821		1923	893	627
11	11139	4125	4821		2193	928	627
12	11585	4290	4821		2473	965	627
13	12048	4462	4821		2765	1004	627
14	12530	4641	4821		3068	1044	627
15	13031	4826	4821		3384	1086	627
16	13553	5019	4821		3712	1129	627
17	14095	5220	4821		4054	1175	627
18	14659	5429	4821		4409	1222	627
19	15245	5646	4821		4778	1270	627
20	15855	5872	4821		5162	1321	627
21	16489	6107	4821		5561	1374	627
22	17148	6351	4821		5976	1429	627
23	17834	6605	4821		6408	1486	627
24	18548	6869	4821		6857	1546	627
25	19290	7144	4821		7325	1607	627
26	20061	7430	4821		7810	1672	627
27	20864	7727	4821		8316	1739	627
28	21698	8036	4821		8841	1808	627
29	22566	8357	4821		9388	1881	627
30	23469	8692	4821	-64868	74824	1956	627

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	7525	301	111	301	7826	1.0400
3	7826	313	116	313	8139	1.0816
4	8139	326	121	326	8465	1.1249
5	8465	339	125	339	8804	1.1699
6	8804	352	130	352	9156	1.2167
7	9156	366	136	366	9522	1.2653
8	9522	381	141	381	9903	1.3159
9	9903	396	147	396	10299	1.3686
10	10299	412	153	412	10711	1.4233
11	10711	428	159	428	11139	1.4802
12	11139	446	165	446	11585	1.5395
13	11585	463	172	463	12048	1.6010
14	12048	482	178	482	12530	1.6651
15	12530	501	186	501	13031	1.7317
16	13031	521	193	521	13553	1.8009
17	13553	542	201	542	14095	1.8730
18	14095	564	209	564	14659	1.9479
19	14659	586	217	586	15245	2.0258
20	15245	610	226	610	15855	2.1068
21	15855	634	235	634	16489	2.1911
22	16489	660	244	660	17148	2.2788
23	17148	686	254	686	17834	2.3699
24	17834	713	264	713	18548	2.4647
25	18548	742	275	742	19290	2.5633
26	19290	772	286	772	20061	2.6658
27	20061	802	297	802	20864	2.7725
28	20864	835	309	835	21698	2.8834
29	21698	868	321	868	22566	2.9987
30	22566	903	334	903	23469	3.1187

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = RATE OF INFLATION, 4.25 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1075
Allowed Return on Equity	0.1500
Initial Rent	666.21
Initial Operating Cost per Month	232.25
Cost Inflation	0.0400
CPI Inflation	0.0400
Statutory Increase	0.0400

Amortization period (years)	30
Monthly Mortgage Pmt.	402
Resale Value (base year $)	20000

SUMMARY OF RESULTS

Internal Rate of Return	0.1500
PV of Cash Flow	.0000
Future Resale Value	64868
PV of Resale Value	980
Next Approximation	666.2068

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	7994	2787	4821		386	666	666
2	8314	2898	4821		595	693	666
3	8647	3014	4821		811	721	666
4	8993	3135	4821		1037	749	666
5	9352	3260	4821		1271	779	666
6	9727	3391	4821		1515	811	666
7	10116	3526	4821		1768	843	666
8	10520	3668	4821		2032	877	666
9	10941	3814	4821		2306	912	666
10	11379	3967	4821		2591	948	666
11	11834	4125	4821		2887	986	666
12	12307	4290	4821		3196	1026	666
13	12799	4462	4821		3516	1067	666
14	13311	4641	4821		3850	1109	666
15	13844	4826	4821		4197	1154	666
16	14398	5019	4821		4557	1200	666
17	14974	5220	4821		4932	1248	666
18	15572	5429	4821		5323	1298	666
19	16195	5646	4821		5728	1350	666
20	16843	5872	4821		6150	1404	666
21	17517	6107	4821		6589	1460	666
22	18218	6351	4821		7046	1518	666
23	18946	6605	4821		7520	1579	666
24	19704	6869	4821		8014	1642	666
25	20492	7144	4821		8527	1708	666
26	21312	7430	4821		9061	1776	666
27	22164	7727	4821		9616	1847	666
28	23051	8036	4821		10194	1921	666
29	23973	8357	4821		10795	1998	666
30	24932	8692	4821	-64868	76287	2078	666

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = RATE OF INFLATION, 4.25 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	7994	320	111	320	8314	1.0400
3	8314	333	116	333	8647	1.0816
4	8647	346	121	346	8993	1.1249
5	8993	360	125	360	9352	1.1699
6	9352	374	130	374	9727	1.2167
7	9727	389	136	389	10116	1.2653
8	10116	405	141	405	10520	1.3159
9	10520	421	147	421	10941	1.3686
10	10941	438	153	438	11379	1.4233
11	11379	455	159	455	11834	1.4802
12	11834	473	165	473	12307	1.5395
13	12307	492	172	492	12799	1.6010
14	12799	512	178	512	13311	1.6651
15	13311	532	186	532	13844	1.7317
16	13844	554	193	554	14398	1.8009
17	14398	576	201	576	14974	1.8730
18	14974	599	209	599	15572	1.9479
19	15572	623	217	623	16195	2.0258
20	16195	648	226	648	16843	2.1068
21	16843	674	235	674	17517	2.1911
22	17517	701	244	701	18218	2.2788
23	18218	729	254	729	18946	2.3699
24	18946	758	264	758	19704	2.4647
25	19704	788	275	788	20492	2.5633
26	20492	820	286	820	21312	2.6658
27	21312	852	297	852	22164	2.7725
28	22164	887	309	887	23051	2.8834
29	23051	922	321	922	23973	2.9987
30	23973	959	334	959	24932	3.1187

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 2 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1075
Allowed Return on Equity	0.1275
Initial Rent	682.09
Initial Operating Cost per Month	232.25
Cost Inflation	0.0400
CPI Inflation	0.0400
Statutory Increase	0.0300

Amortization period (years)	30
Monthly Mortgage Pmt.	402
Resale Value (base year $)	20000
SUMMARY OF RESULTS	
Internal Rate of Return	0.1275
PV of Cash Flow	.0000
Future Resale Value	64868
PV of Resale Value	1772
Next Approximation	682.0903

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	8185	2787	4821		577	682	682
2	8431	2898	4821		711	703	676
3	8684	3014	4821		848	724	669
4	8944	3135	4821		988	745	663
5	9212	3260	4821		1131	768	656
6	9489	3391	4821		1277	791	650
7	9773	3526	4821		1426	814	644
8	10067	3668	4821		1578	839	637
9	10369	3814	4821		1733	864	631
10	10680	3967	4821		1892	890	625
11	11000	4125	4821		2053	917	619
12	11330	4290	4821		2218	944	613
13	11670	4462	4821		2387	972	607
14	12020	4641	4821		2558	1002	602
15	12381	4826	4821		2733	1032	596
16	12752	5019	4821		2912	1063	590
17	13135	5220	4821		3094	1095	584
18	13529	5429	4821		3279	1127	579
19	13935	5646	4821		3467	1161	573
20	14353	5872	4821		3660	1196	568
21	14783	6107	4821		3855	1232	562
22	15227	6351	4821		4055	1269	557
23	15683	6605	4821		4257	1307	551
24	16154	6869	4821		4464	1346	546
25	16639	7144	4821		4674	1387	541
26	17138	7430	4821		4887	1428	536
27	17652	7727	4821		5104	1471	531
28	18181	8036	4821		5324	1515	525
29	18727	8357	4821		5548	1561	520
30	19289	8692	4821	-64868	70644	1607	515

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 2 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	8185	246	111	246	8431	1.0400
3	8431	253	116	253	8684	1.0816
4	8684	261	121	261	8944	1.1249
5	8944	268	125	268	9212	1.1699
6	9212	276	130	276	9489	1.2167
7	9489	285	136	285	9773	1.2653
8	9773	293	141	293	10067	1.3159
9	10067	302	147	302	10369	1.3686
10	10369	311	153	311	10680	1.4233
11	10680	320	159	320	11000	1.4802
12	11000	330	165	330	11330	1.5395
13	11330	340	172	340	11670	1.6010
14	11670	350	178	350	12020	1.6651
15	12020	361	186	361	12381	1.7317
16	12381	371	193	371	12752	1.8009
17	12752	383	201	383	13135	1.8730
18	13135	394	209	394	13529	1.9479
19	13529	406	217	406	13935	2.0258
20	13935	418	226	418	14353	2.1068
21	14353	431	235	431	14783	2.1911
22	14783	443	244	443	15227	2.2788
23	15227	457	254	457	15683	2.3699
24	15683	471	264	471	16154	2.4647
25	16154	485	275	485	16639	2.5633
26	16639	499	286	499	17138	2.6658
27	17138	514	297	514	17652	2.7725
28	17652	530	309	530	18181	2.8834
29	18181	545	321	545	18727	2.9987
30	18727	562	334	562	19289	3.1187

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 4.25 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1075
Allowed Return on Equity	0.1500
Initial Rent	717.47
Initial Operating Cost per Month	232.25
Cost Inflation	0.0400
CPI Inflation	0.0400
Statutory Increase	0.0300

Amortization period (years)	30
Monthly Mortgage Pmt.	402
Resale Value (base year $)	20000

SUMMARY OF RESULTS

Internal Rate of Return	0.1500
PV of Cash Flow	-0.0006
Future Resale Value	64868
PV of Resale Value	980
Next Approximation	717.4719

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	8610	2787	4821		1002	717	717
2	8868	2898	4821		1148	739	711
3	9134	3014	4821		1298	761	704
4	9408	3135	4821		1452	784	697
5	9690	3260	4821		1609	808	690
6	9981	3391	4821		1769	832	684
7	10280	3526	4821		1933	857	677
8	10589	3668	4821		2100	882	671
9	10906	3814	4821		2271	909	664
10	11234	3967	4821		2446	936	658
11	11571	4125	4821		2624	964	651
12	11918	4290	4821		2806	993	645
13	12275	4462	4821		2992	1023	639
14	12644	4641	4821		3182	1054	633
15	13023	4826	4821		3376	1085	627
16	13414	5019	4821		3573	1118	621
17	13816	5220	4821		3775	1151	615
18	14230	5429	4821		3981	1186	609
19	14657	5646	4821		4190	1221	603
20	15097	5872	4821		4404	1258	597
21	15550	6107	4821		4622	1296	591
22	16017	6351	4821		4844	1335	586
23	16497	6605	4821		5071	1375	580
24	16992	6869	4821		5302	1416	575
25	17502	7144	4821		5537	1458	569
26	18027	7430	4821		5776	1502	564
27	18568	7727	4821		6020	1547	558
28	19125	8036	4821		6267	1594	553
29	19698	8357	4821		6520	1642	547
30	20289	8692	4821	-64868	71644	1691	542

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

LOW INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 4.25 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	8610	258	111	258	8868	1.0400
3	8868	266	116	266	9134	1.0816
4	9134	274	121	274	9408	1.1249
5	9408	282	125	282	9690	1.1699
6	9690	291	130	291	9981	1.2167
7	9981	299	136	299	10280	1.2653
8	10280	308	141	308	10589	1.3159
9	10589	318	147	318	10906	1.3686
10	10906	327	153	327	11234	1.4233
11	11234	337	159	337	11571	1.4802
12	11571	347	165	347	11918	1.5395
13	11918	358	172	358	12275	1.6010
14	12275	368	178	368	12644	1.6651
15	12644	379	186	379	13023	1.7317
16	13023	391	193	391	13414	1.8009
17	13414	402	201	402	13816	1.8730
18	13816	414	209	414	14230	1.9479
19	14230	427	217	427	14657	2.0258
20	14657	440	226	440	15097	2.1068
21	15097	453	235	453	15550	2.1911
22	15550	467	244	467	16017	2.2788
23	16017	480	254	480	16497	2.3699
24	16497	495	264	495	16992	2.4647
25	16992	510	275	510	17502	2.5633
26	17502	525	286	525	18027	2.6658
27	18027	541	297	541	18568	2.7725
28	18568	557	309	557	19125	2.8834
29	19125	574	321	574	19698	2.9987
30	19698	591	334	591	20289	3.1187

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = RATE OF INFLATION, 2 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1875
Allowed Return on Equity	0.2075
Initial Rent	648.86
Initial Operating Cost per Month	232.25
Cost Inflation	0.1200
CPI Inflation	0.1200
Statutory Increase	0.1200

Amortization period (years)	30
Monthly Mortgage Pmt.	675
Resale Value (base year $)	20000
SUMMARY OF RESULTS	
Internal Rate of Return	0.2075
PV of Cash Flow	.0000
Future Resale Value	599198
PV of Resale Value	2094
Next Approximation	648.8605

Year	Rental Revenue /a	Opera-ting Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	7786	2787	8100		-3101	649	649
2	8721	3121	8100		-2501	727	649
3	9767	3496	8100		-1829	814	649
4	10939	3916	8100		-1077	912	649
5	12252	4385	8100		-234	1021	649
6	13722	4912	8100		710	1144	649
7	15369	5501	8100		1767	1281	649
8	17213	6161	8100		2952	1434	649
9	19279	6901	8100		4278	1607	649
10	21592	7729	8100		5763	1799	649
11	24183	8656	8100		7427	2015	649
12	27085	9695	8100		9290	2257	649
13	30335	10858	8100		11377	2528	649
14	33976	12161	8100		13714	2831	649
15	38053	13620	8100		16332	3171	649
16	42619	15255	8100		19264	3552	649
17	47733	17085	8100		22548	3978	649
18	53461	19136	8100		26225	4455	649
19	59877	21432	8100		30344	4990	649
20	67062	24004	8100		34958	5588	649
21	75109	26884	8100		40125	6259	649
22	84122	30110	8100		45912	7010	649
23	94217	33724	8100		52393	7851	649
24	105523	37770	8100		59652	8794	649
25	118186	42303	8100		67783	9849	649
26	132368	47379	8100		76889	11031	649
27	148252	53065	8100		87087	12354	649
28	166042	59432	8100		98510	13837	649
29	185968	66564	8100		111303	15497	649
30	208284	74552	8100	-599198	724830	17357	649

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = RATE OF INFLATION, 2 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	7786	934	334	934	8721	1.1200
3	8721	1046	375	1046	9767	1.2544
4	9767	1172	420	1172	10939	1.4049
5	10939	1313	470	1313	12252	1.5735
6	12252	1470	526	1470	13722	1.7623
7	13722	1647	589	1647	15369	1.9738
8	15369	1844	660	1844	17213	2.2107
9	17213	2066	739	2066	19279	2.4760
10	19279	2313	828	2313	21592	2.7731
11	21592	2591	927	2591	24183	3.1058
12	24183	2902	1039	2902	27085	3.4785
13	27085	3250	1163	3250	30335	3.8960
14	30335	3640	1303	3640	33976	4.3635
15	33976	4077	1459	4077	38053	4.8871
16	38053	4566	1634	4566	42619	5.4736
17	42619	5114	1831	5114	47733	6.1304
18	47733	5728	2050	5728	53461	6.8660
19	53461	6415	2296	6415	59877	7.6900
20	59877	7185	2572	7185	67062	8.6128
21	67062	8047	2880	8047	75109	9.6463
22	75109	9013	3226	9013	84122	10.8038
23	84122	10095	3613	10095	94217	12.1003
24	94217	11306	4047	11306	105523	13.5523
25	105523	12663	4532	12663	118186	15.1786
26	118186	14182	5076	14182	132368	17.0001
27	132368	15884	5686	15884	148252	19.0401
28	148252	17790	6368	17790	166042	21.3249
29	166042	19925	7132	19925	185968	23.8839
30	185968	22316	7988	22316	208284	26.7499

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = RATE OF INFLATION, 4.25 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1875
Allowed Return on Equity	0.2300
Initial Rent	703.26
Initial Operating Cost per Month	232.25
Cost Inflation	0.1200
CPI Inflation	0.1200
Statutory Increase	0.1200

Amortization period (years)	30
Monthly Mortgage Pmt.	675
Resale Value (base year $)	20000

SUMMARY OF RESULTS

Internal Rate of Return	0.2300
PV of Cash Flow	.0000
Future Resale Value	599198
PV of Resale Value	1203
Next Approximation	703.2551

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	8439	2787	8100		-2448	703	703
2	9452	3121	8100		-1770	788	703
3	10586	3496	8100		-1010	882	703
4	11856	3916	8100		-160	988	703
5	13279	4385	8100		793	1107	703
6	14873	4912	8100		1861	1239	703
7	16657	5501	8100		3056	1388	703
8	18656	6161	8100		4395	1555	703
9	20895	6901	8100		5894	1741	703
10	23402	7729	8100		7573	1950	703
11	26210	8656	8100		9454	2184	703
12	29356	9695	8100		11561	2446	703
13	32878	10858	8100		13920	2740	703
14	36824	12161	8100		16562	3069	703
15	41243	13620	8100		19522	3437	703
16	46192	15255	8100		22837	3849	703
17	51735	17085	8100		26549	4311	703
18	57943	19136	8100		30707	4829	703
19	64896	21432	8100		35364	5408	703
20	72684	24004	8100		40580	6057	703
21	81406	26884	8100		46421	6784	703
22	91174	30110	8100		52964	7598	703
23	102115	33724	8100		60291	8510	703
24	114369	37770	8100		68498	9531	703
25	128093	42303	8100		77690	10674	703
26	143465	47379	8100		87985	11955	703
27	160680	53065	8100		99515	13390	703
28	179962	59432	8100		112429	14997	703
29	201557	66564	8100		126893	16796	703
30	225744	74552	8100	-599198	742290	18812	703

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = RATE OF INFLATION, 4.25 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	8439	1013	334	1013	9452	1.1200
3	9452	1134	375	1134	10586	1.2544
4	10586	1270	420	1270	11856	1.4049
5	11856	1423	470	1423	13279	1.5735
6	13279	1593	526	1593	14873	1.7623
7	14873	1785	589	1785	16657	1.9738
8	16657	1999	660	1999	18656	2.2107
9	18656	2239	739	2239	20895	2.4760
10	20895	2507	828	2507	23402	2.7731
11	23402	2808	927	2808	26210	3.1058
12	26210	3145	1039	3145	29356	3.4785
13	29356	3523	1163	3523	32878	3.8960
14	32878	3945	1303	3945	36824	4.3635
15	36824	4419	1459	4419	41243	4.8871
16	41243	4949	1634	4949	46192	5.4736
17	46192	5543	1831	5543	51735	6.1304
18	51735	6208	2050	6208	57943	6.8660
19	57943	6953	2296	6953	64896	7.6900
20	64896	7788	2572	7788	72684	8.6128
21	72684	8722	2880	8722	81406	9.6463
22	81406	9769	3226	9769	91174	10.8038
23	91174	10941	3613	10941	102115	12.1003
24	102115	12254	4047	12254	114369	13.5523
25	114369	13724	4532	13724	128093	15.1786
26	128093	15371	5076	15371	143465	17.0001
27	143465	17216	5686	17216	160680	19.0401
28	160680	19282	6368	19282	179962	21.3249
29	179962	21595	7132	21595	201557	23.8839
30	201557	24187	7988	24187	225744	26.7499

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 2 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1875
Allowed Return on Equity	0.2075
Initial Rent	818.03
Initial Operating Cost per Month	232.25
Cost Inflation	0.1200
CPI Inflation	0.1200
Statutory Increase	0.0900

Amortization period (years)	30
Monthly Mortgage Pmt.	675
Resale Value (base year $)	20000

SUMMARY OF RESULTS

Internal Rate of Return	0.2075
PV of Cash Flow	.0000
Future Resale Value	599198
PV of Resale Value	2094
Next Approximation	818.0305

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	9816	2787	8100		-1071	818	818
2	10700	3121	8100		-522	892	796
3	11663	3496	8100		66	972	775
4	12712	3916	8100		697	1059	754
5	13857	4385	8100		1371	1155	734
6	15104	4912	8100		2092	1259	714
7	16463	5501	8100		2862	1372	695
8	17945	6161	8100		3683	1495	676
9	19560	6901	8100		4559	1630	658
10	21320	7729	8100		5491	1777	641
11	23239	8656	8100		6483	1937	624
12	25330	9695	8100		7535	2111	607
13	27610	10858	8100		8652	2301	591
14	30095	12161	8100		9834	2508	575
15	32804	13620	8100		11083	2734	559
16	35756	15255	8100		12401	2980	544
17	38974	17085	8100		13788	3248	530
18	42482	19136	8100		15246	3540	516
19	46305	21432	8100		16773	3859	502
20	50472	24004	8100		18368	4206	488
21	55015	26884	8100		20030	4585	475
22	59966	30110	8100		21756	4997	463
23	65363	33724	8100		23539	5447	450
24	71246	37770	8100		25375	5937	438
25	77658	42303	8100		27255	6472	426
26	84647	47379	8100		29168	7054	415
27	92266	53065	8100		31101	7689	404
28	100569	59432	8100		33037	8381	393
29	109621	66564	8100		34956	9135	382
30	119487	74552	8100	-599198	636033	9957	372

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 2 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statutory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	9816	883	334	883	10700	1.1200
3	10700	963	375	963	11663	1.2544
4	11663	1050	420	1050	12712	1.4049
5	12712	1144	470	1144	13857	1.5735
6	13857	1247	526	1247	15104	1.7623
7	15104	1359	589	1359	16463	1.9738
8	16463	1482	660	1482	17945	2.2107
9	17945	1615	739	1615	19560	2.4760
10	19560	1760	828	1760	21320	2.7731
11	21320	1919	927	1919	23239	3.1058
12	23239	2092	1039	2092	25330	3.4785
13	25330	2280	1163	2280	27610	3.8960
14	27610	2485	1303	2485	30095	4.3635
15	30095	2709	1459	2709	32804	4.8871
16	32804	2952	1634	2952	35756	5.4736
17	35756	3218	1831	3218	38974	6.1304
18	38974	3508	2050	3508	42482	6.8660
19	42482	3823	2296	3823	46305	7.6900
20	46305	4167	2572	4167	50472	8.6128
21	50472	4543	2880	4543	55015	9.6463
22	55015	4951	3226	4951	59966	10.8038
23	59966	5397	3613	5397	65363	12.1003
24	65363	5883	4047	5883	71246	13.5523
25	71246	6412	4532	6412	77658	15.1786
26	77658	6989	5076	6989	84647	17.0001
27	84647	7618	5686	7618	92266	19.0401
28	92266	8304	6368	8304	100569	21.3249
29	100569	9051	7132	9051	109621	23.8839
30	109621	9866	7988	9866	119487	26.7499

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 4.25 POINT SPREAD

Capital Cost	57385
Equity	14346
Mortgage	43039
Mortgage Interest	0.1875
Allowed Return on Equity	0.2300
Initial Rent	864.22
Initial Operating Cost per Month	232.25
Cost Inflation	0.1200
CPI Inflation	0.1200
Statutory Increase	0.0900

Amortization period (years)	30
Monthly Mortgage Pmt.	675
Resale Value (base year $)	20000

SUMMARY OF RESULTS

Internal Rate of Return	0.2300
PV of Cash Flow	-0.0010
Future Resale Value	599198
PV of Resale Value	1203
Next Approximation	864.2244

Year	Rental Revenue /a	Operating Cost/a	Mortgage Payments	Capital Expense (Recovery)	Cash Flow	Future Monthly Rent	Real Monthly Rent
0				14346	-14346		
1	10371	2787	8100		-517	864	864
2	11304	3121	8100		82	942	841
3	12321	3496	8100		725	1027	819
4	13430	3916	8100		1414	1119	797
5	14639	4385	8100		2153	1220	775
6	15957	4912	8100		2945	1330	755
7	17393	5501	8100		3791	1449	734
8	18958	6161	8100		4697	1580	715
9	20664	6901	8100		5663	1722	695
10	22524	7729	8100		6695	1877	677
11	24551	8656	8100		7795	2046	659
12	26761	9695	8100		8966	2230	641
13	29169	10858	8100		10211	2431	624
14	31795	12161	8100		11533	2650	607
15	34656	13620	8100		12935	2888	591
16	37775	15255	8100		14420	3148	575
17	41175	17085	8100		15989	3431	560
18	44881	19136	8100		17645	3740	545
19	48920	21432	8100		19388	4077	530
20	53323	24004	8100		21219	4444	516
21	58122	26884	8100		23137	4843	502
22	63353	30110	8100		25142	5279	489
23	69054	33724	8100		27230	5755	476
24	75269	37770	8100		29398	6272	463
25	82043	42303	8100		31640	6837	450
26	89427	47379	8100		33948	7452	438
27	97476	53065	8100		36311	8123	427
28	106249	59432	8100		38716	8854	415
29	115811	66564	8100		41146	9651	404
30	126234	74552	8100	-599198	642780	10519	393

CALCULATION OF ECONOMIC RENTS WITH GORING'S COST DATA

HIGH INFLATION, STATUTORY RATE = .75*RATE OF INFLATION, 4.25 POINT SPREAD

CALCULATION OF ALLOWED RENT INCREASE

Year	Previous Annual Rent	Statu-tory Increase	Increase in Costs	Allowed Increase	Allowed Annual Rent	CPI
0						
1						1.0000
2	10371	933	334	933	11304	1.1200
3	11304	1017	375	1017	12321	1.2544
4	12321	1109	420	1109	13430	1.4049
5	13430	1209	470	1209	14639	1.5735
6	14639	1318	526	1318	15957	1.7623
7	15957	1436	589	1436	17393	1.9738
8	17393	1565	660	1565	18958	2.2107
9	18958	1706	739	1706	20664	2.4760
10	20664	1860	828	1860	22524	2.7731
11	22524	2027	927	2027	24551	3.1058
12	24551	2210	1039	2210	26761	3.4785
13	26761	2408	1163	2408	29169	3.8960
14	29169	2625	1303	2625	31795	4.3635
15	31795	2862	1459	2862	34656	4.8871
16	34656	3119	1634	3119	37775	5.4736
17	37775	3400	1831	3400	41175	6.1304
18	41175	3706	2050	3706	44881	6.8660
19	44881	4039	2296	4039	48920	7.6900
20	48920	4403	2572	4403	53323	8.6128
21	53323	4799	2880	4799	58122	9.6463
22	58122	5231	3226	5231	63353	10.8038
23	63353	5702	3613	5702	69054	12.1003
24	69054	6215	4047	6215	75269	13.5523
25	75269	6774	4532	6774	82043	15.1786
26	82043	7384	5076	7384	89427	17.0001
27	89427	8048	5686	8048	97476	19.0401
28	97476	8773	6368	8773	106249	21.3249
29	106249	9562	7132	9562	115811	23.8839
30	115811	10423	7988	10423	126234	26.7499

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